

Although the oak woodland communities on the proposed infill site are not included on CDFW's list of special-status plant communities, the importance of protecting oak woodlands is recognized through the passage of the Oak Woodlands Conservation Act and CEQA Section 21083.4, as described in "Regulatory Considerations" below.

Wetlands and Other Waters of the United States

While a significant portion of the area where the proposed infill facility would be constructed has been modified through its annual use for effluent disposal (for several decades following activation of Mule Creek State Prison) there are three seasonal streams (Mule Creek, which is not within the development site, and two unnamed tributaries), and eight seasonal wetlands on the infill site (Exhibit 3.2-1). Based on a wetland verification by the U.S. Army Corps of Engineers' (USACE) conducted during April 2013, all of these features may be subject to regulation under Section 404 of the CWA. Each of the aquatic features delineated on the project site is described further below:

SW1 is a 0.043-acre wet depression located in an area of convergent slopes (i.e., a draw) and dominated by pennyroyal (*Mentha pulegium*) and dotted smartweed (*Persicaria punctata*). This wetland receives water from rainwater and effluent runoff from the adjacent spray fields. This feature is dominated by hydrophytic vegetation and exhibits indicators of hydric soils. Indicators of wetland hydrology were not visible at the time of the delineation, but the delineation was conducted during the dry season and during a drought year and wetland hydrology indicators are likely to be observed during the wet season and during normal precipitation years. This wetland feature does not appear to be connected or adjacent to other waters of the U.S.

SW2 is a 0.012-acre wet depression located in a draw and dominated Himalayan blackberry, poison oak, Baltic rush (*Juncus balticus*), and Muhlenberg's centaury (*Zeltnera muehlenbergii*). This wetland receives water from rainwater and effluent runoff from the adjacent spray fields. Though this feature contains dominant wetland plants in the herbaceous understory, the shrub layer is dominated by upland plants. This feature contains redox depressions, a hydric soil indicator. Indicators of wetland hydrology were not visible at the time of the delineation, but the delineation was conducted during the dry season and during a drought year and wetland hydrology indicators are likely to be observed during the wet season and during normal precipitation years. This wetland feature does not appear to be connected or adjacent to other waters of the U.S.

SW3 is a 0.065-acre wet depression located at the downslope end of the draw containing SW1, SW2, and SW6. The draw terminates at an earthen berm that causes increased ponding in this small depression. Dominant vegetation consists of barnyard grass (*Echinochloa crus-galli*), northern water plantain (*Alisma triviale*), rabbitsfoot grass (*Polypogon monspeliensis*), and cocklebur (*Xanthium strumarium*). Although this feature meets the three criteria (soils, hydrology, and vegetation) to qualify as a wetland according to the USACE definition, it is not connected or adjacent to other waters of the United States.

SW4 is a 0.33-acre seasonal swale network in gently sloping topography. The swale consists of two forks that converge then connect to a seasonal stream (SS1). Vegetation in this wetland is dominated by Baltic rush and Italian ryegrass (*Festuca perennis*). This feature is located at the head of an unnamed seasonal stream and the source of water is rainwater and effluent runoff from the surrounding spray fields. This appears to be the lowest point within the spray field and, thus, all of the runoff from the field collects here then flows into the seasonal drainage channel. Soil, vegetation, and hydrology are significantly disturbed in this feature due to seasonal plowing; however, dark color signatures on aerial imagery indicate regularly saturated soil conditions. This feature is directly connected to the unnamed tributary to Mule Creek and is, therefore, subject to regulation under the CWA.

SW5 is a 0.11-acre pool area within Mule Creek. This feature is directly connected to Mule Creek and is, therefore, subject to regulation under the CWA.

SW6 is a 0.046-acre wet depression located in the same draw containing SW1, SW2, and SW3. Vegetation, soils, and hydrology are very similar to those described for SW2. This wetland feature does not appear to be connected or adjacent to other waters of the U.S.

SW7 is a 0.017-acre excavated depression within a spray field. Dominant vegetation consists of barnyard grass, northern water plantain, rabbitsfoot grass, and cocklebur. This wetland feature does not appear to be connected to or adjacent other waters of the U.S.

SW8 is a 0.028-acre low-lying area in gently sloping topography, similar to SW4. Soil, vegetation, and hydrology are significantly disturbed at this location due to seasonal plowing. This feature is directly connected to an unnamed tributary to Sulter Creek and is, therefore, subject to regulation under the CWA.

SS1 is 0.19-acre seasonal stream that begins at SW8 and drains via culvert into the armored diversion channel south of the infill site. The water source for this drainage is rainwater and effluent runoff from the surrounding spray fields. Surface water is absent from this drainage channel during most of the year, but groundwater availability is sufficient to support riparian trees. The lower 750 feet of this seasonal stream supports a narrow strip of riparian woodland vegetation characterized by large Fremont cottonwood and willow trees in the overstory and Himalayan blackberry, Coyote brush, and poison oak in the shrub layer. The upper 300 feet of this feature is more ephemeral in nature and supports seasonal wetland vegetation when not plowed. Because this feature is connected to Mule Creek, via the diversion channel, and Mule Creek is ultimately connected to the Mokelumne River, it would be considered a jurisdictional water of the United States subject to regulation under the CWA.

SS2 is a 0.028-acre segment of Mule Creek where an existing 18-foot-wide bridge crosses the stream. The channel and banks beneath the bridge are armored with riprap for approximately 40 feet. Beyond the riprapped section, the banks support mature riparian woodland vegetation as described above. Mule Creek is a seasonal tributary to Dry Creek, which joins the Mokelumne River downstream of Comanche Reservoir and ultimately drains to the San Joaquin River in the Sacramento-San Joaquin River Delta. Therefore, Mule Creek meets the definition of other waters of the United States and is subject to regulation under the CWA.

SS3 is a 60-foot long, 0.005-acre seasonal stream channel formed at the base of a slope. This channel conveys flows sporadically during rain events and is characterized by upland grasses. The channel crosses under a dirt access road via culvert and drains into the spray fields, and ultimately into the unnamed tributary to Mule Creek (SS1). Therefore, this feature would be considered a jurisdictional water of the United States subject to regulation under the CWA.

SS4 is a 0.004-acre segment of Mule Creek where a utility line connection would be installed under the stream channel using jack-and-bore technology. An existing dirt access road crosses through the stream channel at this location. Beyond the dirt road crossing, the banks support mature riparian woodland vegetation as described previously. Mule Creek is a seasonal tributary to Dry Creek, which joins the Mokelumne River downstream of Comanche Reservoir and ultimately drains to the San Joaquin River in the Sacramento-San Joaquin River Delta. Therefore, Mule Creek meets the definition of other waters of the United States and is subject to regulation under the CWA.

SS5 is a 0.001-acre seasonal stream that crosses under an existing paved access road via culvert. This drainage collects runoff from existing prison facilities and drains directly to Mule Creek. Because this feature is connected to Mule Creek and Mule Creek is ultimately connected to the Mokelumne River, it would be considered a jurisdictional water of the United States subject to regulation under the CWA.

EXHIBIT “20”

GAVIN NEWSOM
GOVERNORJARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

10 June 2019

Gregor Larabee
CDCR – Mule Creek State Prison
9838 Old Placerville Road #8
Sacramento, CA 95827

CERTIFIED MAIL
7017 1070 000 8877 0531

NOTICE OF APPLICABILITY; GENERAL SECTION 401 WATER QUALITY CERTIFICATION ORDER REQUIREMENTS FOR THE MULE CREEK STATE PRISON, MULE CREEK STATE PRISON SURFACE WATER SAMPLING PROJECT (WDID#5B03CR00087), AMADOR COUNTY

On 29 April 2019, Mule Creek State Prison (Applicant) filed a notification requesting coverage under the 17 March 2017 State Water Resources Control Board Clean Water Act Section 401 General Water Quality Certification and Order of the United States Army Corps of Engineers 2017 Nationwide Permits (General Certification Order) for the Mule Creek State Prison Surface Water Sampling Project (Project). After review of the notification and the supplemental material submitted by the Applicant, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has determined that the Project qualifies for enrollment under this General Certification Order. The proposed activity will take place within less than 0.001 acre/40 linear feet of waters of the United States.

The Central Valley Water Board is certifying this Project under United States Army Corps of Engineers Nationwide Permit #5 (Scientific Measurement Devices), subject to the conditions and the notification requirements described in the Nationwide Permit ("Special Conditions"). This Notice of Applicability is being issued under the General Certification Order pursuant to § 3838 of the California Code of Regulations.

A copy of the General Certification Order is enclosed. You can also find the General Certification Order on the State Water Resources Control Board's website at: http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/nwp_go.pdf

The Project must proceed in accordance with the requirements contained in this Notice of Applicability and General Certification Order. The Project is described in the notification form requesting coverage under the General Certification Order, dated 29 April 2019, and supplementary information (Application Package). Coverage under the General Certification Order is no longer valid if the Project (as described) is modified.

KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

PROJECT DESCRIPTION:

The Mule Creek State Prison Surface Water Sampling Project (Project) consists of installing a temporary surface water monitoring and sampling device in Mule Creek for collecting stream flow data and collecting surface water samples for laboratory analysis. Activities include installing a pressure transducer and screened water sampling tube within Mule Creek at 2 locations. Installation consists of securing the pressure transducer, placed within a perforated PVC pipe, to 0.5-inch-diameter rebar anchored, at least 1-foot deep, into the channel bottom. Stream bed is rock/cobble at the installation locations with no aquatic vegetation. Screened flexible sampling tubing will be anchored to the instream rebar and run along the stream bed and up the bank slope to an auto-sampler placed upland.

Installations will occur by hand. Following completion of planned sampling events all of the rebar, transducer, and screened tubing will be removed from the stream channel by hand.

The Project will temporarily impact less than 0.001 acre/40 linear feet of waters of the United States.

APPROXIMATE TIMEFRAME OF PROJECT IMPLEMENTATION:

10 June 2019 through 31 May 2021

PROJECT LOCATION:

4001 Highway 104
Ione, California 95640

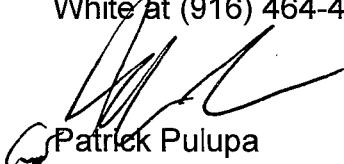
Latitude: 38°22'21.16"N and Longitude: 120°56'49.09"W

APPLICATION FEE RECEIVED:

An application fee of \$1,638.00 was received on 2 May 2019.

The fee amount was determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3); and was calculated as category E – Low Impact Discharges authorized by a Water Board General Order (fee code 87) with the dredge and fill fee calculator.

If you have any questions regarding this Notice of Applicability, please contact Nicholas White at (916) 464-4856 or Nicholas.White@waterboards.ca.gov.



Patrick Pulupa
Executive Officer

Enclosure: State Water Resources Control Board Clean Water Act Section 401
General Water Quality Certification and Order of United States Army Corps
of Engineers 2017 Nationwide Permits

DISTRIBUTION LIST

[Via email only] (w/enclosure)

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EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

CLEAN WATER ACT SECTION 401 GENERAL WATER QUALITY CERTIFICATION AND ORDER

Effective Date: March 17, 2017
Program Type: Fill/Excavation

Reg. Meas. ID: 411836 SWRCB ID: SB17001GN
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Project: State Water Board Certification of the 2017 Nationwide Permits
(Project)

Applicant: Department of the Army, Corps of Engineers
Applicant Contact: Colonel David G. Ray, P.E.
District Commander
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Sacramento, CA 95814-2922
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State Water Board Contact Person:

If you have any questions, please call State Water Resources Control Board (State Water Board) Staff listed above or (916) 341-5478 and ask to speak with the Water Quality Certification and Wetlands Unit Program Manager.

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I. Executive Summary

This Clean Water Act (CWA) section 401 Water Quality Certification action and General Order (General Order) with attachments A through D is issued at the request of U.S. Army Corps of Engineers (herein after Corps). On March 19, 2017, the Corps Nationwide Permits (NWP's) go into effect. This General Order conditionally certifies 14 NWP's for projects discharging to only waters of the United States. The remaining 38 NWP's are denied without prejudice.

Notwithstanding the provisions of this general certification, the State Water Board or Regional Water Boards (collectively Water Boards) may deny any NOI and instead require a discharger to apply for an individual certification or a certification under another general order. A discharger may choose to apply for an individual water quality certification.

Certified Nationwide Permits			
NWP No.	Nationwide Permit	Decision	Title 14 of the California Code of Regulations Section/Exemption
1	Aids to Navigation: Allows the placement of USCG-approved navigational aids.	Certify subject to conditions	§15304 /Minor Alterations to Land; and §15311 /Accessory Structures
4	Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities: Allows fish and wildlife harvesting devices and activities.	Certify subject to conditions and specific activity restrictions	§15304 /Minor Alterations to Land
5	Scientific Measurement Devices: Allows the placement of scientific gages, recording devices, water quality testing and improvement devices, and similar structures; allows the construction of weirs and flumes constructed primarily to record water quantity and velocity.	Certify subject to conditions and notification requirements	§15306 /Information Collection
6	Survey Activities: Allows core sampling, seismic exploration, and plugging of exploration bore holes.	Certify subject to conditions and notification requirements	§15304 /Minor Alterations to Land
9	Structures in Fleeting and Anchorage Areas: Allows placement of structures to facilitate mooring of vessels within anchorage areas established by the USCG.	Certify subject to conditions	§15301 /Existing facilities; and §15304 /Minor Alterations to Land
10	Mooring Buoys: Allows non-commercial, single-boat mooring buoys.	Certify subject to conditions	§15304 /Minor Alterations to Land
11	Temporary Recreational Structures: Allows the temporary placement of buoys, markers, small floating docks, and similar structures placed during special water events.	Certify subject to conditions	§15304 /Minor Alterations to Land
12	Utility Line Activities: Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities.	Certify subject to conditions, specific activity restrictions and notification requirements	§15301 Existing Facilities; 15302 Replacement or Reconstruction; 15303 New Construction or Conversion of Small Structures; §15304 /Minor Alterations to Land; and 15309 Inspections

Certified Nationwide Permits (cont.)			
20	Response Operations for Oil and Hazardous Substances: Allows cleanup of oil and hazardous substances provided the work activity is done in accordance with federal regulations and any existing State contingency plans, and has the concurrence of the federal Regional Response Team.	Certify subject to conditions	§15307 /Actions by Regulatory Agencies for Protection of Natural Resources; §15308/ Action by Regulatory Agencies for Protection of the Environment; and §15330/Minor Actions to Prevent, Minimize, Stabilize, Mitigate or Eliminate the Release or Threat of Release of Hazardous Waste or Hazardous Substances
22	Removal of Vessels: Allows minor discharges of fill in connection with removal of disabled or abandoned vessels or manmade obstructions to navigation. This NWP does not authorize maintenance dredging, shoal removal, or river snagging.	Certify subject to conditions	§15301 /Existing Facilities; and §15303/ New Construction or Conversion of Small Structures
28	Modifications of Existing Marinas: Allows the reconfiguration of existing dock space in an authorized marina. No dredging or expansion of any kind would be permitted.	Certify subject to conditions and notification requirements	§15301 /Existing Facilities; and §15303/ New Construction or Conversion of Small Structures
32	Completed Enforcement Actions: Allows any structure, work, or discharge that is in compliance with a final federal court decision, consent decree, or settlement agreement resulting from a federal enforcement violation action under section 404 or section 10.	Certify subject to conditions and notification requirements	§15321 / Enforcement Action by Regulatory Agencies
36	Boat Ramps: Activities required for the construction of boat ramps.	Certify subject to conditions, specific activity restrictions and notification requirements	§15303 /New Construction or Conversion of Small Structures; and §15304 /Minor Alterations to Land
54	Living Shorelines: Activities required for the construction and maintenance of living shorelines to stabilize banks and shores in coastal waters.	Certify subject to conditions and notification requirements	§15304 /Minor Alterations to Land and §15333/ Small Habitat Restoration Projects

II. General Order

This General Order is for the purpose described in the application submitted by the Corps. The application was received on June 1, 2016, the date the Corps first noticed the NWPs in the Federal Register to solicit comments on the proposed new and modified NWPs, general conditions and definitions (81 Fed.Reg. 35186-35240 (Jun. 6, 2016)). On June 30th, the State Water Board received a letter from Colonel David G. Ray requesting review and approval of the proposed NWPs. The application was determined to be complete on January 6, 2017, the date the Corps announced an effective date for the reissuance of the Nationwide Permits (NWPs), general conditions, definitions with some modifications, and also the issuance of two new NWPs and one new general condition in the Federal Register (82 Fed.Reg. 1860-2008 (Jan. 6, 2017)).

III. Public Notice

In addition to the Corps notice, the State Water Board provided public notice of the proposed certification of the 2017 NWP's pursuant to California Code of Regulations, title 23, section 3858 from January 25, 2017 to March 11, 2017. The State Water Board did not receive any comments during the comment period.

IV. Project Purpose

The Corps is seeking a water quality certification action by the State Water Board for the 2017 NWP's. The Corps issues NWP's to authorize certain activities that require Corps permits under section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbor Act of 1899. The Corps issues general conditions for the NWP's that modify, suspend, or revoke NWP's for specific activities or within specific geographic regions. In addition, districts or divisions add other conditions, called regional conditions to the general conditions. The Corps will reissue 50 existing NWP's, general conditions, and definitions, with some modifications. The Corps will also issue two new NWP's and one new general condition. The effective date for the new and reissued NWP's is March 19, 2017. These NWP's will expire on March 18, 2022. The NWP's will protect the aquatic environment and the public interest while effectively authorizing activities that have no more than minimal individual and cumulative adverse environmental effects.

V. Project Description

The NWP's authorize a variety of activities, such as aids to navigation, utility line crossings, erosion control activities, road crossings, stream and wetland restoration activities, residential developments, mining activities, commercial shellfish aquaculture activities, and agriculture activities. The two new NWP's authorize the removal of low-head dams and the construction and maintenance of living shorelines.

Some NWP activities may proceed without notifying the Corps, as long as those activities comply with all applicable terms and conditions of the NWP's, including regional conditions imposed by division engineers. Other NWP activities cannot proceed until the discharger has submitted a pre-construction notification to the Corps, and for most NWP's that require pre-construction notifications, the Corps has 45 days to notify the discharger whether the activity is authorized by NWP.

VI. Project Location

An individual project authorized by the Water Board under this General Order (project) may occur anywhere within California except as restricted herein. A map showing the nine California Regional Water Boards: the North Coast Regional Water Board, San Francisco Regional Water Board, Central Coast Regional Water Board, Los Angeles Regional Water Board, Central Valley Regional Water Board, Lahontan Regional Water Board, Colorado River Regional Water Board, Santa Ana Regional Water Board and San Diego Regional Water Board (collectively Regional Water Boards), jurisdictional boundaries is found in Attachment C of this General Order.

VII. Project Impact and Receiving Waters Information

Receiving waters and groundwater potentially impacted by individual projects authorized under this General Order are protected in accordance with the applicable water quality control

plans for the regions and other plans and policies which may be accessed online at: http://www.waterboards.ca.gov/plans_policies/. The water quality control plans include water quality standards, which consist of existing and potential beneficial uses of waters of the state, water quality objectives to protect those uses, and the state and federal antidegradation policies.

Dischargers will identify the receiving waters and beneficial uses of waters of the state to be impacted by a proposed project, as listed in the applicable Regional Water Board water quality control plan. This information will be included in the Notice of Intent (NOI; Attachment A), which must be completed by a discharger to apply for an individual NWP certification under this General Order.

VIII. Description of Direct Impacts to Waters of the State

The Corps issues a "decision document" for each NWP to fulfill the requirements of the National Environmental Policy Act. The decision documents serve as an environmental assessment of the potential effects of the authorized dredge or fill discharge impacts to waters of the U.S. The decision documents also include an alternatives analysis conducted pursuant to the Clean Water Act section 404(b)(1) Guidelines. The final decision document for each NWP is available on the internet at: www.regulations.gov (docket ID number COE-2015-0017). In addition, the Corps district engineers will issue supplemental decision documents to address their decisions concerning regional conditions for the NWP's (82 Fed.Reg.1866 (Jan. 6, 2017)).

Dischargers will describe all proposed direct project impacts in the NOI, which must be completed for certification under NWP 5, 6, 12, 22 28, 32, 36 and 54.

IX. Avoidance and Minimization

The NWP's provide benefits by encouraging project proponents to minimize their proposed impacts to waters of the United States and design their projects within the scope of the NWP's, rather than applying for individual permits for activities that could result in greater adverse impacts to the aquatic environment. Project impacts to waters of the state must be avoided and minimized to the greatest practicable extent.

Dischargers will describe project design steps taken to first avoid, and then minimize, impacts to waters of the state to the maximum extent practicable in the NOI, which must be completed for certification NWP 5, 6, 12, 22 28, 32, 36 and 54 .

X. California Environmental Quality Act (CEQA)

The State Water Board has determined that projects authorized by this General Order are exempt from review under CEQA pursuant to California Code of Regulations, title 14, section 15061. Specifically, the issuance of this Order and the activities described herein meet the exemption criteria under California Code of Regulations, title 14, section(s) listed in the table provided in Executive Summary section I. Additionally, the State Water Board concludes that no exceptions to the CEQA exemption apply to the activities approved by this Order. The State Water Board will file a Notice of Exemption with the State Clearinghouse within five (5) working days from the issuance of this Order (Cal. Code Regs., tit. 14, § 15062).

XI. Petitions for Reconsideration

Any person aggrieved by this action may petition the State Water Board to reconsider this General Order in accordance with California Code of Regulations, title 23, section 3867. A petition for reconsideration must be submitted in writing and received within 30 calendar days of the issuance of this General Order.

XII. Application Fees

Fees are not required for NWPs 1, 4, 9, 10, 11 and 20. An application fee is required for NWP 5, 6, 12, 22, 28, 32, 36 and 54 project under this General Order. The application fee amount is determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3), and is calculated as category F - General Orders for CEQA Exempt Projects (fee code 19) with the dredge and fill fee calculator located at http://www.waterboards.ca.gov/water_issues/programs/cwa401/index.shtml. Note that this fee periodically adjusted. Dischargers should confirm the correct fee amount prior to submitting an NOI.

XIII. Conditions

The Water Board will independently review the record of any project proposed for authorization by this General Order to analyze impacts to water quality and designated beneficial uses within the watersheds of the project. This General Order grants certification to NWPs 1, 4, 5, 6, 9, 10, 11, 12, 20, 22, 28, 32, 36, and 54 subject to the following terms and conditions:

A. Notification and Reporting Requirements The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment B, including specifications for photo and map documentation. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment B, which must be signed by the authorized representative.

1. Request for Authorization The administrative process for authorization by this General Order varies according to NWP, as follows:

- a.** Other than the accidental discharge of hazardous materials reporting, dischargers with projects authorized under NWP 1, 4, 9, 10, 11 and 20 are not required to submit notifications or reports to the Water Board as required in this General Order. Dischargers shall comply with all other applicable General Order conditions. Failure to comply with the General Order conditions may subject a discharger to administrative and/or judicial enforcement.
- b.** Dischargers with projects authorized under NWP 5, 6, 12, 22, 28, 32, 36 and 54 shall pay the required fee and follow notification and reporting requirements described in the Project Status Notifications section below, and found in Attachments A and B of this General Order. Dischargers shall submit a complete NOI to the appropriate Water Board(s) as described in Attachment A at least 45 days before any project activity. The Notice of Intent shall include a description and delineation of impact sites.

2. Project Status Notifications

- a. **Commencement of Construction:** The discharger shall submit a Commencement of Construction Notice at least seven (7) days prior to start of initial ground disturbance activities.
- b. **Request for Notice of Project Complete Letter:** This request shall be submitted to the Water Board within thirty (30) days following completion of all project activities including post-construction monitoring of restoration sites. Upon approval of the request, the Water Board shall issue a Notice of Project Complete Letter to the discharger.

3. Project Reporting

- a. **Annual Reporting:** If required in the NOA, the discharger shall submit an Annual Report each year on the anniversary of date the project is authorized by this General Order. Annual reporting shall continue until a Notice of Project Complete Letter is issued to the discharger. The discharger shall provide at least one annual report, in the event that the project is completed in less than one year.

4. Conditional Notifications and Reports

The following notifications and reports are required, as applicable:

- a. **Accidental Discharges of Hazardous Materials¹** Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Wat. Code, § 13271):
 - i. As soon as (A) discharger has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then:
 - first call – 911 (to notify local response agency)
 - then call – Office of Emergency Services (OES) State Warning Center at: (800) 852-7550 or (916) 845-8911
 - Lastly follow the required OES procedures as set forth in:
[http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill Booklet Feb2014 FINAL BW Acc.pdf](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill%20Booklet%20Feb2014%20FINAL%20BW%20Acc.pdf)
 - ii. Following notification to OES, the discharger shall notify the Water Board, as soon as practicable (ideally within 24 hours). Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.

¹ "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (Health & Saf. Code, § 25501.)

- iii. Within five (5) working days of notification to the Water Board, the discharger must submit an Accidental Discharge of Hazardous Material Report.
- b. **Violation of Compliance with Water Quality Standards:** The discharger shall notify the Water Board of any event causing a violation of compliance with water quality standards. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
 - i. Examples of noncompliance events include: lack of storm water treatment following a rain event, discharges causing a visible plume in a water of the state, and water contact with uncured concrete.
 - ii. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.
- c. **In-Water Work:**
 - i. The discharger shall notify the Water Board at least forty-eight (48) hours prior to initiating work in flowing or standing water or stream diversions. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
 - ii. Within three (3) working days following completion of work in water or stream diversions, an In-Water Work/Diversions Water Quality Monitoring Report must be submitted to the Water Board.
- d. **Modifications to Project:** The discharger shall give advance notice to the Water Board if project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The discharger shall inform the Water Board of any project modifications that will interfere with the compliance with this General Order.
- e. **Transfer of Property Ownership:** Authorization by this General Order is not transferable in its entirety or in part to any person or organization except after notice to the Water Board in accordance with the following terms:
 - i. The discharger must notify the Water Board of any change in ownership or interest in ownership of the project area by submitting a Transfer of Property Ownership Report. The discharger and purchaser must sign and date the notification and provide such notification to the Water Board at least 10 days prior to the transfer of ownership. The purchaser must also submit a written request to the Water Board to be named as the discharger in a revised order.
 - ii. Until such time as this Order has been modified to name the purchaser as the discharger, the discharger named on the NOI shall continue to be responsible for all requirements set forth in this Order.
- f. **Transfer of Long-Term BMP Maintenance:** If maintenance responsibility for post-construction BMPs is legally transferred, the discharger must submit to the Water Board a copy of such documentation and must provide the transferee with a copy of

a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The discharger must provide such notification to the Water Board with a Transfer of Long-Term BMP Maintenance Report at least 10 days prior to the transfer of BMP maintenance responsibility.

B. Water Quality Monitoring

1. **General:** In work areas during construction, visual monitoring shall be conducted to detect accidental discharge of construction related pollutants (e.g. oil and grease, turbidity plume, or uncured concrete).
2. **Accidental Discharges/Noncompliance:** Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, the Water Board may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.
3. **In-Water Work or Diversions:** For projects involving planned work in water or stream diversions, a water quality monitoring plan shall be submitted to the Water Board for acceptance at least 30 days in advance of any discharge to the affected water body. Water quality monitoring shall be conducted in accordance with the approved plan.
4. **Post-Construction:** If the proposed project includes ground disturbance, visually inspect the project site during the rainy season (October 1 – April 30) until a Notice of Completion is issued to ensure excessive erosion, stream instability, or other water quality pollution is not occurring in or downstream of the project site. If water quality pollution is occurring, contact the Water Board staff member overseeing the project within three (3) working days. The Water Board may require the submission of a Violation of Compliance with Water Quality Standards Report. Additional permits may be required to carry out any necessary site remediation.

C. Standard Conditions

1. This General Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, title 23, chapter 28, Article 6 commencing with section 3867. Additionally, the State Water Board may cancel or modify and reissue this General Order pursuant to California Code of Regulations, title 23, chapter 28, section 3861.
2. This General Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to subsection 3855(b) of chapter 28, title 23 of the California Code of Regulations, and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This General Order is conditioned upon total payment of any fee required under title 23 of the California Code of Regulations.
4. In the event of any violation or threatened violation of the conditions of this General Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act, section 401(d), the applicability of any state law authorizing remedies,

penalties, processes, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this General Order.

D. General Compliance

1. Failure to comply with any condition of this General Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13385.
2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the water quality control plans by any applicable Regional Water Board or any applicable State Water Board water quality control plan or policy (including the California Ocean Plan). The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any condition of this General Order, the Water Board may require a discharger with authorization under this General Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Board deem appropriate, provide that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.
4. This General Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.
5. **Historical Sites:** This General Order does not authorize any activity adversely impacting a significant historical or archeological resource; directly or indirectly destroying a unique paleontological resource or site or unique geologic feature; disturbing any human remains; or eliminating important examples of the major periods of California history or prehistory, unless the activity is authorized by the appropriate historical resources agencies.
6. **Construction General Permit Requirement:** The discharger shall maintain compliance with conditions described in, and required by, NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002). For ground disturbing activities that do not require enrollment in Order No. 2009-0009-DWQ, project plans included with the NOI shall include appropriate erosion and sediment control measures. Specific measures are required in the construction conditions listed in section XIII.H. below.
7. **Cumulative Impacts:** Activities permitted under this General Order shall not result in impacts that are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
8. **Grandfather Provision:** Authorization under this General Order shall extend until the Corps NWP's expire on March 18, 2022. If a project authorized by the 2017 NWP's has

commenced or is under contract to commence by March 18, 2022, one year from the NOA date will be allowed to complete the project under the terms of the 2017 General Order. If a project has not commenced or is not under contract to commence by March 18, 2022, a new Notice of Intent, or individual application, and applicable fees will be required.

E. General Prohibitions

1. This General Order conditionally certifies 14 NWP for projects discharging to only waters of the United States. Applicants proposing projects that discharge to waters of the state that are not waters of the United States must apply to the Water Board for waste discharge requirements.
2. This General Order shall not apply to projects for which any Corps NWP conditions or regional conditions have been waived by the Corps District Engineer.
3. This General Order shall not apply to projects for which more than one NWP has been issued by the Corps except as provided in NWP 12 –Utility Line Replacements section XIII.F.2.a.
4. This General Order shall not apply to projects requiring compensatory mitigation for impacts to waters except as provided in NWP 12 –Utility Line Replacements section XIII.F.2.e.
5. This General Order shall not apply to projects impacting vernal pools.
6. This General Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). If a “take” will result from any act authorized under this General Order held by the discharger, the discharger must obtain authorization for the take prior to any construction or operation of the portion of the project that may result in a take. The discharger is responsible for meeting all requirements of the applicable endangered species act for the project authorized under this General Order.

F. Nationwide Specific Compliance

1. **NWP 4 –Survey Activities –Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities:** No activities that could be permitted under NWP 48–Commercial Shellfish Aquaculture Activities, shall be permitted under this certification of NWP 4.
2. **NWP 12 –Utility Line Activities:** Because of the number, geographic scale, and variety of potential environmental impacts that are possible under NWP 12, temporary and permanent impacts to waters of the state are subject to the project, discharger and statewide size limits and restrictions below. Cumulative statewide, permanent impacts for all projects certified under NWP 12 are limited to a total of five (5) acres; in the event that this statewide maximum is met, applicants for additional proposed NWP 12 projects with permanent impacts must apply for an individual water quality certification. In addition,

each discharger shall be restricted to one-quarter acre of permanent impacts for the life of this General Order.

a. Individual Project Impact Size Limits to Waters of the States

- i. This General Order authorizes projects for which more than one NWP 12 has been authorized as long as the following size restrictions are not exceeded:
- ii. **Temporary Impacts Acreage:** The project shall not result in more than one-half ($\frac{1}{2}$) acre (0.5 acre) of temporary impacts to waters of the state.
- iii. **Permanent Impact Acreage:** The project shall not result in more than 200 square feet (0.005 acre) of permanent impacts to waters of the state.
- iv. **Temporary Impact Length:** The project shall not result in more than 400 linear feet of temporary impacts to waters of the state.
- v. **Permanent Impact Length:** The project shall not result in more than 50 linear feet of permanent impacts to waters of the state.

b. Nationwide Permit 12 Prohibitions:

- i. **Lahontan Water Board:** Any NWP 12 activity within the Lake Tahoe Hydrologic Unit (HUC;634.00) and the Truckee River HUC (635.00) and the Little Truckee River HUC (636.00) is prohibited.
- ii. **Overhead Crossings:** Construction, replacement, or maintenance of overhead utility lines (e.g., telephone or electric lines) spanning any water of the state can only be authorized when trimming of riparian vegetation causes less than a five percent canopy reduction.
- iii. **Riparian Tree Removal:** If a project involves removal of riparian trees list the following information on the project NOI form for each adult tree proposed for removal: species; common name; diameter breast height; and whether part of the riparian understory or overstory. Any removal of trees that results in adverse effects to water quality is prohibited.
- iv. **Roads:** Maintenance of utility line access roads under this NWP shall be confined to the previously existing road prism, except for minor, targeted widening or improvements. Grading of throughput roads (any road having a running surface lower than the surrounding terrain on both sides of the road) is prohibited.
- v. Construction, replacement, or expansion of facilities in any ocean, bay, tidal waters or the shores thereof is prohibited.
- vi. **Armoring facilities:** Placement of in-stream armor over or surrounding a utility line or pipe that is above the streambed is prohibited.
- vii. **Gabions:** Use of gabions ("rock gabions" and similar wire basket structures) in waters of the state is prohibited.

- viii. **Grouted riprap:** Use of grouted riprap in waters of the state is prohibited.
- c. **Authorized Permanent Impacts:** This General Order authorizes permanent impacts resulting from the following activity types only when associated with the construction, maintenance, or repair of utility lines, and subject to the restrictions and limits in subsections a and b above:
- i. **Facility Replacements:** such as poles, underground lines, foundations for overhead utility line towers, and other activities associated with utility lines or their access roads (e.g., wet crossings, culverts, bridge abutments) and appurtenances (e.g., guy wires, anchors, grounding wires, valves), located more than thirty feet from the original location. May also include structure removals.
 - ii. **Access Road Crossing Repair, Improvements, and Upgrades:** the replacement or repair of existing culverts and associated outlets/headwalls, bridge abutments, or other road crossings repairs or resurfacing in waters of the state. The repair of existing or installation of new minor non-grouted rip rap, armoring or other erosion control measures to protect existing utility access roads or existing structures from scour and erosion.
 - iii. **New Access Road Crossings/Structures/Outfalls and widening of existing roads:** includes new structures, outfalls, bridge abutments, road repairs or resurfacing, installation of new culverts or associated outlets, and erosion control/dissipation devices to protect the existing utility access roads. For example, the installation of concrete or non-grouted rip rap on an existing utility access road to create a low-water (Arizona) crossing. Also includes the minor widening of existing roads.
 - iv. **Utility Structure Upgrades:** includes the installation of similar poles with upgrades (e.g., new caissons), upgrades to larger poles or poles of different composition, conversion of overhead to underground, etc. Also includes the installation of new caissons, non-grouted rip rap, or other armoring to protect existing structures from scour and erosion, and new minor line extensions.
 - v. **Underground Linear Activities:** excavation for inspection or repair of underground facilities, installation of new pipes/cables across streams, placement of structures or erosion control to protect under-stream pipes/cables, and installation of new valves or other appurtenances.
 - vi. **Other:** includes facility drainage system repair, maintenance, or installation at existing facilities such as substations and other bank stabilization efforts.
- d. **Nationwide Permit 12 Specially Designated Temporary Impacts**
- i. **Poles or Culvert Relocation:** Poles or culvert relocation within thirty feet is considered a temporary impact as long as the replacement footprint does not exceed ten percent of the original footprint, and the original footprint is completely restored.

ii. **Roadside ditches:** Impacts to roadside ditches are considered temporary if the roadside ditch has the following characteristics:

- the feature is artificially constructed (e.g., man-made);
- the feature is not in or a part of a stream channel or other waters of the state, or in a stream channel or other waters of the state that has been relocated in uplands;
- the feature would not cause or contribute to an impairment of downstream beneficial uses; and
- the feature is restored following construction such that the pre-construction course, condition and capacity are retained to the maximum extent practicable.

e. **Nationwide Permit 12 Compensatory Mitigation Requirements:** The discharger shall adhere to the process below for any proposed projects that would result in permanent impacts to waters of the state:

- i. Prior to submitting an NOI for an individual project, the discharger shall submit a letter of credit in favor of the State Water Board for the purchase of mitigation bank or in-lieu fee program credits sufficient to offset total anticipated permanent impacts for all proposed projects for the current year.
- ii. By January 15 of each year, the discharger shall submit to the State Water Board, a mitigation plan that includes elements as outlined in 40 CFR § 230.94(c)(5)-(6) and the following:
 1. A report of permanent impacts incurred through December 31 of the previous year as detailed in Attachment B; and
 2. Proposed credit purchase for to offset the previous year's permanent impacts from a Corps approved mitigation bank or in-lieu fee program.

The following mitigation ratios apply towards the purchase of establishment or reestablishment credits. If enhancement or preservation credits are proposed, mitigation ratios will be determined on an individual project basis.

Mitigation Description	Mitigation Ratio
In-kind, in watershed	1:1
In-kind, outside of watershed	2:1
Out-of-kind, in watershed	3:1
Out-of-kind, outside of watershed	4:1

These ratios apply only if credits are purchased within eighteen months of impact, otherwise mitigation ratios may be increased to account for temporal loss.

3. By June 1, the discharger shall submit proof of credit purchase to the State Water Board that offset the previous year's permanent impacts.

3. NWP 36 –Boat Ramps:

- a. **Lake Tahoe Basin:** Any NWP 36 activity within the Lake Tahoe Hydrologic Unit (HUC;634.00) and the Truckee River HUC (635.00) and the Little Truckee River HUC (636.00) is prohibited.
- b. Any material excavated to prepare a site for placement of the permitted fill material must be properly disposed of in an upland area. The disposal area must be located at a sufficient distance away from flowing or standing water such that the excavated material does not erode or move in any way into any water of the state. The disposal area shall be identified in the project NOI.
- c. To prevent the release of uncured cement or cement components into water, use of concrete in areas where ramps may be submerged before the concrete is fully cured is prohibited.

G. Administrative

1. Signatory requirements for all document submittals required by this Order General Order are presented in Attachment D of this General Order.
2. The discharger shall grant Water Board staff or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to:
 - a. Enter upon the project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.
 - b. Have access to and copy any records that are kept and are relevant to the project or the requirements of this General Order.
 - c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Order.
 - d. Sample or monitor for the purposes of assuring General Order compliance.
3. A copy of this General Order shall be provided to any consultants, contractors, and subcontractors working on the project. Copies of this General Order shall remain at the project site for the duration of this General Order. The discharger shall be responsible for work conducted by its consultants, contractors, and any subcontractors.
4. A copy of this General Order must be available at the project site(s) during construction for review by site personnel and agencies. All personnel performing work on the project shall be familiar with the content of this General Order and its posted location at the project site.
5. Lake and Streambed Alteration Agreement – If issued, the discharger shall submit a signed copy of the Department of Fish and Wildlife's lake and streambed alteration agreement to the Water Board prior to any discharge to waters of the state.

H. Construction Conditions

Best management practices shall be followed to protect water quality from fill and/or excavation impacts as much as possible. If applicable, the following conditions apply to each project authorized by this General Order:

Good Site Management "Housekeeping"

1. All materials and supplies necessary for implementing these construction conditions must be on-site and ready for use at the start of construction activity, and must remain in supply and ready for implementation throughout the construction process. All non-structural BMP materials (e.g., training documents, compliance tracking procedures) must be ready for use at the start of construction.
2. Construction material, debris, rubbish, spoils, soil, silt, sawdust, rubbish, steel, welding slag, welding rods, waste material, waste containers, other organic or earthen material, or any other substances which could be detrimental to water quality or hazardous to aquatic life that is discharged as a result of project related activities shall be prevented from entering waters of the state.
3. The limits of project disturbance must be clearly identified in the field prior to start of construction activities within waters of the state. Such identification must be properly maintained until construction is completed and the soils have been stabilized. Equipment, materials, or any other substances or activities that may impact waters of the state outside of the limits of project disturbance are prohibited.
4. Environmentally sensitive areas and environmentally restricted areas must be delineated for exclusion prior to start of construction.

Excavation

5. Topsoil: For any excavation, including utility line trenches, the top 6 to 12 inches of topsoil shall be removed and stockpiled separately during construction. Following installation of the utility line(s), the topsoil shall be replaced and seeded with native vegetation.

Toxic and Hazardous Materials

6. Activities permitted under this General Order shall not discharge substances in concentrations toxic to human, plant, animal, or aquatic life or that produce detrimental physiological responses.
7. Discharge of unset cement, concrete, grout, damaged concrete spoils, or water that has contacted uncured concrete or cement, or related washout to surface waters, ground waters, or land is prohibited. If concrete washout is necessary at a site, washout containment to prevent any discharge shall be used. Wastewater may only be disposed by delivery to a sanitary waste water collection system/facility (with authorization from the facility's owner or operator) or a properly licensed disposal or reuse facility.
8. Appropriate BMPs must be implemented throughout project activities to prevent and control potential leaks/spills/drainage of potentially hazardous materials such as: petroleum lubricants, fluids and fuels; non-petroleum lubricants, fluids and fuels such as

non-petroleum hydraulic fluid; cured and uncured cements; epoxies, paints and other protective coating materials; cement concrete or asphalt concrete, and washings and cuttings thereof.

9. Activities permitted under this General Order shall not discharge waste classified as "hazardous" as defined California Code of Regulations title 22, section 66261 and Water Code section 13173. Appropriate BMPs for hazardous substances shall be included in project plans provided in the NOI. These BMPs shall include, at minimum:
 - a. All personnel handling fuels and other hazardous materials shall be properly trained.
 - b. Adequate spill prevention and cleanup equipment and materials shall be present on site at all times during project implementation.
 - c. All mechanized equipment shall be maintained in good operating order and inspected on a regular basis.
 - d. All on-site fuel trucks or fuel containers shall be stored in an area where risk of contamination of water bodies by leaks or spills is minimized.
 - e. All equipment shall be fueled, maintained, and/or parked overnight in an upland area at least 100 feet from any delineated waters of the state.
 - f. Hazardous materials, including chemicals, fuels, and lubricating oils, shall not be stored within 100 feet of any delineated waters of the state, and shall be stored in appropriate containers with appropriate secondary containment.
 - g. Pumps or other stationary equipment operating within 100 feet of a waterbody or wetland shall utilize appropriate secondary containment systems to prevent spills.
 - h. Any spills or leaks of hazardous materials, chemicals, fuels, lubricants or any other potential pollutants shall be promptly and completely treated using appropriate materials and equipment.
10. Spill containment supplies shall be on site in all work areas in sufficient quantities to allow immediate remediation of fuel, oil, hydraulic fluid or similar leaks and spills.
11. A staging area for equipment and vehicle fueling and storage shall be designated at least one-hundred (100) feet away from waters of the state, in a location where fluids or accidental discharges cannot flow into waters of the state.

Use of Mechanized Equipment

12. Activities permitted under this General Order shall be conducted in a manner that minimizes ground disturbance, soil compaction, rutting and other mechanical impacts. Equipment shall be operated and maintained in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to water bodies or wetlands. Appropriate project-specific BMPs shall be specified by the discharger and shall be provided as part of the project description included in the NOI.

Invasive Species and Soil Borne Pathogens

13. The discharger is responsible for ensuring that all project personnel follow proper weed control practices, and that appropriate weed prevention measures are included in project plans.
14. Any straw, hay or other unprocessed plant material used for any purpose must be certified or documented as being weed free.
15. Soil borne pathogens are any nematodes, or any bacterial, protozoan, viral or fungal pathogens that can cause disease or death to native plants, agricultural crops or ornamental plants (e.g., *Phytophthora ramorum*, the cause of sudden oak death syndrome, and *Phytophthora lateralis*, the cause of Port Orford cedar root disease). Any equipment entering or leaving the project area from an area of known soil borne pathogen infestation shall be thoroughly cleaned using methods appropriate for the known pathogen before entering or leaving the project area. The fungus that causes Valley Fever, *Coccidioides* spp., is not considered as a soil borne pathogen in this certification.

Work in Delineated Waters

16. Work in delineated waters must not cause water quality objectives of the receiving waters to be exceeded. Work in delineated waters commences at the onset of the regulated activity and continues until the activity is finished and all restoration of the affected work area is complete. The term "work" means any ground disturbing activities in any delineated waters of the state that are permitted under this General Order, regardless of the presence or absence of flowing or standing water.
17. Disturbed areas in delineated waters of the state must be temporarily stabilized to prevent erosion at least 48 hours prior to the predicted commencement of a rainfall event with greater than a 50 percent probability of occurrence, as predicted by the National Oceanic and Atmospheric Administration (NOAA) - National Weather Service. If the predicted commencement of such a rainfall event is less than 48 hours after the prediction is issued, temporary stabilization of the disturbed in-water work areas must begin immediately.

Dewatering and Construction Diversions of Water

18. Temporary diversions or impoundments of water, cofferdams, or similar structures installed for the purpose of temporary dewatering work areas may be permitted if the project description provided by the discharger in the NOI includes: (a) an adequate description of the proposed dewatering structures, including design criteria, (b) appropriate BMPs for the installation, operation, maintenance and removal of those structures, and (c) appropriate monitoring for water quality upstream and downstream of diversion structures as required in section XIII.B of this General Order.
19. All surface waters, including ponded waters, shall be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity which may result in a discharge to waters of the state.

- 20.** Except for the following conditions, equipment must not be operated in standing or flowing waters without site-specific approval from Water Board staff:

All construction activities must be effectively isolated from water flows to the greatest extent possible. This may be accomplished by working in the dry season or dewatering the work area in the wet season. When work in standing or flowing water is required, structures for isolating the in-water work area and/or diverting the water flow must not be removed until all disturbed areas are cleaned and stabilized. The diverted water flow must not be contaminated by construction activities. All open flow temporary diversion channels must be lined with filter fabric or other appropriate liner material to prevent erosion. Structures used to isolate the in-water work area and/or diverting the water flow (e.g., coffer dam, geotextile silt curtain) must not be removed until all disturbed areas are stabilized.

Coffer dams and water barrier construction must be adequate to prevent seepage into or from the work area to the greatest extent feasible.

Flow diversions must be conducted in a manner that prevents pollution and/or siltation and in a manner that restores pre-project flows (except for variation in flows due to seasonality, upstream diversions, etc.) upon completion of the activity. Diverted flows must be of sufficient quality and quantity, and of appropriate temperature, to support existing fish and other aquatic life both above and below the diversion. Diversions must be designed, installed, and maintained to reduce erosion. Pre-project flows must be restored to the affected surface water body upon completion of work at that location.

- 21.** If groundwater dewatering is required for the project, the discharger shall consult with the Water Board to determine if additional permits are required. If additional Water Board permits relating to dewatering are required, the designated Water Board staff contact identified in the project's NOA must be notified and copied on pertinent correspondence pertaining to those other required permits.
- 22.** All temporary dewatering methods shall be designed to have the minimum necessary impacts to waters of the state. All dewatering methods shall be installed such that natural flow is maintained upstream and downstream of the diversion area. Any temporary dams or diversions shall be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the diversion area. All dewatering methods shall be removed immediately upon completion of activities for which diversions are needed.
- 23.** All temporary dewatering activities are subject to the work-in-water reporting and monitoring conditions presented in sections XII.B. above.

Directional Drilling

- 24.** Because Horizontal Directional Drilling (HDD) and similar drilling operations may affect water quality, the following conditions shall apply to all drilling operations under waters of the state:

- a. The discharge of bentonite, drilling muds, lubricants or any drilling compounds into waters of the state is prohibited. A draft HDD or drilling plan shall be prepared, and shall be subject to review by Water Board staff at least 30 days before drilling activities under waters of the state. No HDD or other drilling operations under waters of the state shall commence until the HDD plan is approved by Water Board staff.
- b. Release of bentonite, drilling muds, lubricants or any drilling compounds through fractures in the streambed or bank substrate during drilling is referred to as a "frack-out." Because of the potential for frack-outs to occur, the HDD or drilling plan shall include a frack-out response plan. The frack-out response plan shall specify all measures to be initiated if frack-outs should occur during HDD operations.
- c. For all HDD and other drilling sites, a means of containment (e.g., damming, fluming) or screening capable of capturing all of the potential discharge shall be described in the HDD plan. The downstream end of any such containment structure shall be capable of containing all bentonite or other drilling muds or debris that may be released during boring or drilling. Any drilling mud, spoils, etc. must be completely removed from the streambed prior to removal of the containment structures (e.g., dam, flume, and screen).
- d. An environmental monitor shall provide monitoring for compliance with the HDD or drilling plan throughout drilling operations under waters of the state.
- e. Any HDD or other drilling operation shall be designed and directed in such a way as to minimize the risk of spills and discharges of all types including the frack-out release of drilling lubricants through fractures in the streambed or bank substrates. In substrates where frack-outs are likely to occur, HDD contractors shall employ all reasonable means and methods available to minimize potential for frack-out.
- f. All drilling muds or compounds will be contained and properly disposed of after drilling activities are completed.
- g. If bore pits are excavated to support drilling operations, spoils shall be stored a minimum of 25 feet from the top of the bank of streams or wetland/riparian boundary, where feasible; if site specific conditions warrant storing spoils less than 25 feet from the top of the bank of streams or wetland/riparian boundary this request must be provided in the HDD or drilling plan submitted to the Water Board prior to any drilling activities with potential impacts to waters of the state. Spoils shall be stored behind a sediment barrier and covered with plastic or otherwise stabilized (i.e., tackifiers, mulch, or detention).

Dust Abatement

25. Dust abatement activities can cause discharges of sediment to streams and uplands through application of water or other fluids. Dust abatement chemicals added to water can be hazardous to wildlife and, if allowed to enter streams, detrimental to water quality. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. Dust abatement

products or additives that are known to be detrimental to water quality or wildlife shall not be used, unless specific management needs are documented and product-specific application plans are approved by Water Board staff.

Roads and Bridges

26. The number of access routes, number and size of staging areas, and the total area of the activity must be limited to the minimum necessary to achieve the project goal. Routes and work area boundaries must be clearly demarcated.
27. Bridges, culverts, dip crossings, or other structures must be installed so that water and in-stream sediment flow is not impeded. Appropriate design criteria, practices and materials must be used in areas where access roads intersect waters of the state.
28. Temporary materials placed in any water of the state must be removed as soon as construction is completed at that location, and all temporary roads must be removed or re-contoured and restored according to approved re-vegetation and restoration plans.
29. Any structure, including but not limited to, culverts, pipes, piers, and coffer dams, placed within a stream where fish (as defined in Fish and Game Code section 45) exist or may exist, must be designed, constructed, and maintained such that it does not constitute a barrier to upstream or downstream movement of aquatic life, or cause an avoidance reaction by fish due to impedance of their upstream or downstream movement. This includes, but is not limited to, maintaining the supply of water and maintaining flows at an appropriate depth, temperature, and velocity to facilitate upstream and downstream fish migration. If any structure results in a long-term reduction in fish movement, the discharger shall be responsible for restoration of conditions as necessary (as determined by the Water Board) to secure passage of fish across the structure.
30. A method of containment must be used below any temporary bridge, trestle, boardwalk, and/or other stream crossing structure to prevent any debris or spills from falling into the waters of the state. Containment must be maintained and kept clean for the life of the temporary stream crossing structure.

Erosion and Sediment Control

31. No later than 24 hours prior to the start of a likely rain event, the discharger shall ensure that disturbed areas that drain to waters of the state are protected with correctly installed erosion control measures (e.g., jute, straw, coconut fiber erosion control fabric, coir logs, straw, etc.) or revegetated with propagules (seeds, cuttings, divisions) of locally collected native plants. The likely rain event is defined as any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the project area. The discharger shall obtain on a daily basis a printed copy of the precipitation forecast information (and keep for record) from the National Weather Service Forecast Office (this can be done by entering the zip code of the project's location at <http://www.srh.noaa.gov/forecast>).
32. The timing for installation of the post-construction stormwater BMP subdrains, soils, mulch, and plants shall be scheduled to ensure that the installed bioretention areas do not receive runoff from exposed or disturbed areas that have not been landscaped. The

constructed post-project stormwater BMPs shall not receive site runoff until all project landscaping is planted, and effective erosion control measures implemented to ensure that the stormwater features are protected from sediment accumulation.

33. Use of any new or expanded stream channel or bank armor or artificial structural components placed to prevent channel or bank erosion or movement shall be avoided where possible and minimized when unavoidable and shall be designed so that hydrology of the project area and the affected channel, upstream and downstream, is not adversely affected.

Stormwater Management

34. No individual construction activity may be started if that activity and its associated erosion control measures cannot be completed prior to the onset of precipitation if that construction activity may cause the introduction of sediments into the stream. After any rain event, the discharger shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sedimentation problems and take corrective action as needed. Seventy-two hour weather forecasts from the National Weather Service shall be consulted prior to start-up of any phase of the project that may result in sediment-laden runoff to the project site, and construction plans made to meet this condition.

I. Mitigation for Temporary Impacts

1. The discharger shall restore all areas of temporary impacts to waters of the state and all project site upland areas of temporary disturbance which could result in a discharge of waters of the state as described in an approved restoration plan. The restoration plan shall be submitted for written acceptance by Water Board staff with the NOI. The restoration plan shall provide the following: a schedule; plans for grading of disturbed areas to pre-project contours; planting palette with plant species native to the project area; seed collection location; invasive species management; performance standards; and maintenance requirements (e.g. watering, weeding, and replanting). The discharger shall provide annual monitoring reports in accordance with Reporting and Notification Attachment B.
2. The Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by Water Board staff that the performance standards have not been met or are not likely to be met within the monitoring period.
3. If restoration of temporary impacts to waters of the state is not completed within three hundred sixty five (365) days of the impacts, compensatory mitigation may be required to offset temporal loss of waters of the state.

XIV. Nationwide Permits Denied without Prejudice

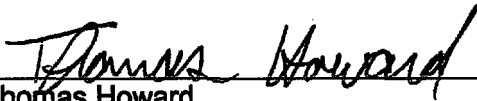
The remaining 38 NWP's are denied certification without prejudice. These NWP's are: 2, 3, 7, 8, 13, 14, 15, 16, 17, 18, 19, 21, 23, 24, 25, 27, 29, 30, 31, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 51, 52 and 53. These NWP's have a wide breadth and scope of activities such that their potential direct, indirect, and cumulative impacts could reasonably invalidate their exemption from CEQA. Clean Water Act section 401 certification of projects

authorized by these 38 NWP's will be considered on an individual, project-specific basis. These NWP's may be considered for certification in the future.

XV. Water Quality Certification

I hereby issue the General Order for the State Water Board Certified 2017 NWP's Project (file number SB17001GN) certifying that as long as all of the conditions listed in this General Order are met, any discharge from the referenced Project will comply with the applicable provisions of Clean Water Act sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards). The State Water Board will file a Notice of Exemption (NOE) at the SCH within five (5) working days of issuance of this General Order. This discharge is also regulated pursuant to State Water Board Water Quality General Order No. 2003-0017-DWQ which authorizes this General Order to serve as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.).

Except insofar as may be modified by any preceding conditions, all General Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions of this General Order and the attachments to this General Order; and, (b) compliance with all applicable requirements of Statewide Water Quality Control Plans and Policies, the Regional Water Boards' Water Quality Control Plans and Policies.



Thomas Howard
Executive Director
State Water Resources Control Board

3/17/17

Date

Attachment A	Notice of Intent
Attachment B	Reporting and Notification Requirements
Attachment C	Project Maps
Attachment D	Signatory Requirements

Attachment A
Notice of Intent

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State Water Board Certification of the 2017 Nationwide Permits Notice of Intent

Section 1: Nationwide Permit Number							
Scientific Measurement Devices	NWP 5 <input type="checkbox"/>		Modification of Existing Marinas		NWP 28 <input type="checkbox"/>		
Survey Activities	NWP 6 <input type="checkbox"/>		Completed Enforcement Actions		NWP 32 <input type="checkbox"/>		
Utility Line Activities	NWP 12 <input type="checkbox"/>		Boat Ramps		NWP 36 <input type="checkbox"/>		
Removal of Vessels	NWP 22 <input type="checkbox"/>		Living Shorelines		NWP 54 <input type="checkbox"/>		
Section 2: Applicant and Agent Information							
		Applicant:			Agent:		
Company/ Agency Name:							
Name of Contact:							
Title:							
Address:							
City, State, Zip:							
Phone Number(s):							
Email Address:							
Section 3: Fees							
Application Fee: Attach a fee check payable to the State Water Board.							
Section 4: Other Agency Permits/ Licenses/ Agreements/ Plans/ Email correspondence (attach application if final action not yet taken):							
Agency:	Have you applied?:	If yes, have you received the permit?:	Permit type:	ID number (e.g. Corps file number):			
<input type="checkbox"/> Corps NWP PCN (for notifying NWPs 11,12,22, 36 and 54)	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> USFWS	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> NMFS	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> Other Federal Permit	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> CDFW Lake or SAA	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> Coastal Development Permit	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> Other State Permits	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> Local Permit(s)	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
<input type="checkbox"/> SWPPP	Y <input type="checkbox"/> N <input type="checkbox"/>	Y <input type="checkbox"/> N <input type="checkbox"/>					
Section 5: Project Information							
Project Name:							
Center Coordinate	Deg.	Min.	Sec.	N	Deg.	Min.	Sec. W
Project Address: Street:							

Section 5: Project Information (cont.)			
City:	Zip Code:	County:	APN:
Construction Timeframe (Provide approximate start and end dates):			
Project Description/Purpose:			
Section 6: Avoidance, Minimization and Cumulative Impacts			
Avoidance and Minimization:			
Cumulative Impacts:			
Section 7: Temporary Impacts, Permanent Impacts and Compensatory Mitigation Information			
Temporary Impacts: Would your project result in temporary impacts? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, attach the restoration plan.			
Total temporary impacts: _____ acre _____ linear feet			
Riparian Tree Removal: Would your project result in the removal of riparian trees? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, use this table for each adult tree proposed for removal (or attach a similar table if additional rows are needed):			
Species:	Common name:	Diameter Breast Height:	Circle to indicate whether the individual is part of the: <div style="display: flex; justify-content: space-around; font-size: 0.8em;"> Overstory Understory </div>
			<div style="display: flex; justify-content: space-around; font-size: 0.8em;"> Overstory Understory </div>
			<div style="display: flex; justify-content: space-around; font-size: 0.8em;"> Overstory Understory </div>
Permanent Impacts: Would your project result in permanent impacts? Yes <input type="checkbox"/> No <input type="checkbox"/> If submitting an NOI for NWP 12: has your irrevocable letter of credit been submitted? Yes <input type="checkbox"/> No <input type="checkbox"/> If no, do not proceed with this NOI.			
Total permanent impacts: _____ acre _____ linear feet			

Table 1: Receiving Water(s) Information

Impact Site ID	Waterbody Name	Impacted Aquatic Resource Type	Water Board Hydrologic Units	Receiving Waters	Receiving Waters Beneficial Uses	303d Listing Pollutant	eCGRAM ID

Table 2: Individual Direct Impact Information

Impact Site ID	Latitude	Longitude	Direct Impact Dimensions	Dredge			Fill/Excavation		
				Acres	Cubic Yards	Linear Feet	Acres	Cubic Yards	Linear Feet
1			Temporary						
			Permanent						
2			Temporary						
			Permanent						
3			Temporary						
			Permanent						
4			Temporary						
			Permanent						
5			Temporary						
			Permanent						
			Total Temporary						
			Total Permanent						

Section 8: Documentation

Check any of the following documents that are applicable to your Project and attach copies to your NOI:

<input type="checkbox"/> Fee check	<input type="checkbox"/> Other agency correspondence listed	<input type="checkbox"/> Delineation report submitted to the Corps
<input type="checkbox"/> Riparian trees proposed for removal	<input type="checkbox"/> Temporary impact restoration plan	<input type="checkbox"/> Map of at least 1:24000 (1" = 2000') detail of proposed discharge site
<input type="checkbox"/> Pre-project photographs	<input type="checkbox"/> Additional pages and/or supplemental information	

Section 9: Applicant and Agent Signature

I hereby designate and authorize the agent/consultant identified in Section 1 to act on my behalf in the processing of this Notice of Intent, and to furnish, upon request, supplemental information in support of this notice:

Applicant Name		Applicant Signature	
<i>I certify that the information provided on this form and all attachments related to this project are true and accurate to the best of my knowledge:</i>			
Applicant Name		Applicant Signature	
Agent Name		Agent Signature	

Submit the completed Notice of Intent, attachment and fees to the appropriate Regional Water Board, or to the State Water Board for NWP 12 projects or for multi-regional projects.

For Internal Water Board Use	
Reviewer	
Date Received	
Reg. Measure ID	
WDID	
Check #	

Notice of Intent Instructions

Applicants seeking General Order authorization for Nationwide Permits (NWP) 5, 6, 12, 22, 28, 32, 36 and 54 from are required to submit a complete Notice of Intent (NOI) form to the appropriate Water Board. Mail NOIs, with the fee check to the Regional Water Board with jurisdiction where the proposed project impacts would occur made payable to "State Water Board". A map showing Regional Water Board jurisdictional boundaries is available online at <http://www.waterboards.ca.gov/waterboardsmap.shtml> and are also provided in Attachment C of this General Order. Submit NOIs for NWP 12 activities, and for projects affecting more than one Regional Board, to the State Water Board with a copy to the appropriate Regional Board(s).

To avoid project delays, submit the NOI as early as possible. Within 30 days of NOI receipt the Water Board shall determine if the application is complete. If the application is complete, within 45 days of NOI receipt, the Water Board will issue either a Notice of Applicability (NOA), informing the discharger that the proposed activity qualifies for authorization, or a Notice of Exclusion (NOE), which informs the discharger that the proposed activity does not qualify for General Order authorization. If an NOE or NOA is not issued by Water Board staff within 45 days from NOI receipt, the discharger may proceed with the project according to all applicable General Order conditions.

Definitions

Consider the following definitions while completing your NOI:

Permanent aquatic resource impacts means permanent loss of aquatic resource area or resource function resulting from a discharge of dredged or fill material that changes an aquatic area to dry land or changes the bottom elevation or dimensions of a waterbody, or changes the surface elevation or dimensions of a wetland.

Temporary aquatic resource impacts means temporary impacts to aquatic resources (e.g., waters temporarily filled, excavated, or drained) where the area, contours, and uses of the impacted aquatic resource is typically restored to pre-project conditions within one year of disturbance. However, the Water Board may determine on a project specific basis that specific time frames for restoration must be imposed to avoid temporal loss which would otherwise be included in permanent loss.

Form Instructions

The information below is required pursuant to California Water Code section 3861(c)(3):

Section 1: Nationwide Permit Number

Identify the NWP number that applies to the applicant's project.

Section 2: Applicant and Agent Information

Applicant Company, Contact Name and Title: Provide the full, legal company name of the applicant or responsible party. Most commonly, the applicant is the property and/or facility owner. If the applicant is an individual and not a company, indicate that a company name is not applicable. If the applicant is an agency, company, corporation or other organization, a contact name (First, Middle Initial, Last) of the main representative of the company and their title must be provided. The applicant will be the entity or individual responsible for compliance with the Clean Water Act, California Water Code, applicable Water Quality Control Plans and General Order Conditions.

Applicant Contact Information: Telephone number, email address, and the company's mailing address (not the project address) including the street, city, state and zip code must be provided.

Consultant/Agent Company, Contact Name and Title: The agent's role is to oversee the processing of the NOI and to make the day-to-day decisions regarding the NOI. It is not a requirement to have an agent. If you choose to be represented by an agent, provide the agent's information in Section 2 of the form. If you choose to not be represented by an agent leave this section blank.

Consultant/Agency Contact Information: Telephone number, email address, and the company's mailing address (not the project address) including the street, city, state and zip code must be provided.

Section 3: Fees

Application Fee: The application fee must be paid at the time of NOI submittal. The fee amount is determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3), and was calculated as category F - General Orders for CEQA Exempt Projects (fee code 19). The dredge and fill fee calculator may be accessed at http://www.waterboards.ca.gov/water_issues/programs/cwa401/index.shtml. This fee is adjusted periodically. ***Dischargers should confirm the correct fee amount prior to submitting an NOI.***

Section 4: Other Agency Permits/ Licenses/ Agreements/ Plans/ Email Correspondence

Provide the following information for each agency:

Permit required: Check yes (Y) if a permit is needed from any of the listed agencies.

If yes, have you received the final permit: If received, check yes (Y) and attach the permit. If not yet received, check no (N) and attach the permit application.

ID number: If the agency issued an identification (ID) number for the project, list it here.

Section 5: Project Information

Project Name: Give the project a name. The Project Name will be used in all correspondence referencing the project. Be sure this Project Name is consistent with other agency applications for the same project, and is consistent on all maps, drawings and reports. Project Name should be clearly relevant to the Project (e.g., Blue Creek Bridge Project; Jones Subdivision Road Widening Project).

Center Coordinates: Indicate the location for the center point of your project in degrees, minutes, seconds (approximate location is acceptable). Assistance in determining a project's coordinates is widely available through various free online services or your local library.

Project Address: Provide the street address of the project location. If the proposed project does not have a physical street address, be as descriptive as possible in the street address line. For example, "Leisure Town Rd., 5.5 miles south of the intersection of I-80 and Leisure Town Rd".

APN: Provide the Assessor's Parcel Number.

Project Construction Timeframe: Provide the estimated start and end dates for the proposed project.

Project Description/ Purpose: Provide a detailed, technically accurate narrative description of the proposed project purpose, project design, all activities planned to complete the design, and total impacts, including area of ground disturbance and areas of impact to all aquatic resources on the site (i.e., any and all streams, wetlands, lakes, ponds, beaches, shorelines, etc). Note that if the U.S. Army Corps of Engineers has declined jurisdiction for any aquatic resources impacted by the Project, the Project is disqualified for this certification of the NWP's, and individual WDRs may be required.

Section 6: Avoidance, Minimization and Cumulative Impacts

Avoidance and Minimization: Describe steps taken to avoid impacts to waters and measures incorporated into the project design to minimize loss of, or significant adverse impacts to, beneficial uses of waters of the state, including on-site restoration of the project area. If the effects of impervious surfaces will be minimized through implementation of Low Impact Development treatments, describe those minimization treatments.

Cumulative Impacts: Include a discussion of any potential cumulative impacts. Provide a brief description, including estimated adverse impacts of any projects implemented by the project applicant within the last five years or planned for implementation by the applicant within the next five years that are in any way related to the proposed activity or that may impact the same receiving water body(ies) as the proposed activity. For the purpose of this item, the waterbody extends to a named source or stream segment identified in the relevant Regional Water Quality Control Plan (Basin Plan).

Section 7: Temporary Impacts, Permanent Impacts and Compensatory Mitigation Information

Temporary Impacts: Check yes if your project results in temporary impacts to waters of the state. Provide the total temporarily impacted area in acres, to the nearest thousandths of an acre. Also state linear feet of impacts, to the nearest whole foot; this quantity must match the sum of temporary impact quantities listed in Table 2. Attach a restoration plan meeting all General Order conditions with your NOI.

Riparian Tree Removal: Check yes if your project results in the removal of mature riparian trees and attach a table listing tree(s) species name(s); common name(s); diameter(s) at breast height (DBH); and whether the removed trees are part of the riparian overstory or understory, or both.

Permanent Impacts: Check yes if your project results in permanent impacts and provide the total permanently impacted area in acres, to the nearest thousandths of an acre; and linear feet, to the nearest whole foot; this quantity must match the sum of permanent impact quantities listed in Table 2.

Table 1: Receiving Waters Information: List each aquatic resource impact site in Table 1.

Impact Site ID: Identify the impact site with a Site ID; Site IDs should correspond to those used in project maps and other agency application materials.

Waterbody Name: List the Water Body name found in the basin plan. If the impact Site ID occurs in an unnamed waterbody state "unnamed tributary" to either the next unnamed tributary or the named receiving waters. Contact Water Board staff for basin plan maps or general assistance completing this section, if needed.

Impacted Aquatic Resource Type: For each impact Site ID, identify the impacted aquatic resource type from the following list: Lake, Ocean, Riparian Zone, Stream Channel, Vernal Pool or Wetland. (More refined or precise resource classifications may be used in Project plans and related documents.)

Water Board Hydrologic Units: Identify the Water Board basin plan hydrologic unit code (HUC). Note that the Basin Plan HUC is *not* the same as a U.S. Geological Survey (USGS) Hydrologic Unit Code (USGS HUC). If unknown, indicate UNK and this information will be completed by Water Board staff.

Receiving waters: List the first downstream waterbody with beneficial use designation in the Water Board basin plan. If unknown, indicate UNK and this information will be completed by Water Board staff.

Receiving Waters Beneficial Uses: List the beneficial use designation. If unknown, indicate UNK and this information will be completed by Water Board staff.

303d Listing Pollutant: List pollutants for receiving waters that have a 303d impairment designation, if the water is not listed indicate NA. If unknown, indicate UNK and this information will be completed by Water Board staff.

eCRAM ID: If a California Rapid Assessment Method (CRAM) assessment has been performed at this location, provide the CRAM assessment area ID and attach the CRAM score sheet.

Table 2: Individual Direct Impact Information

Impact Site ID: Identify the impact site with a Site ID; Site IDs should correspond to those used in Table 1.

Latitude and Longitude: Provide the center coordinate of the impact site.

Direct Impact Dimensions: Provide the area, length, and volume of material excavated, filled or dredged to the nearest cubic yard. When the project impacts a shoreline, record the length of shoreline impacted. When a project impacts a channel, bed, banks, or adjacent riparian area, record the length of channel impacted in the direction of flow. For polygonal projects that do not have a clear linear aspect (such as transmission line tower foundations), record the distance of the longest line that can be drawn across or through the site. For activities that don't include excavation or filling (such as road grading), enter NA for cubic yards.

Section 8: Documentation

Attach the following documents to your NOI: Use this checklist to confirm the necessary documentation is attached to your NOI. If you determine one of the listed items does not pertain to your project write NA in the corresponding box:

- a. **Fee check for the appropriate amount (NOI Section 3)**
- b. **Other agency correspondence (NOI Section 4)**
- c. **Delineation report submitted to the Corps**
- d. **Table 3: Mature riparian trees proposed for removal (NOI Section 7)**
- e. **Temporary impact restoration and monitoring plan (NOI Section 7)**
- f. **Map(s) (NOI Section 7)** Submit maps of sufficient detail to clearly illustrate all project elements, site characteristics, and impacts, with a scale of at least 1:24000 (1" = 2000'). Acceptable map formats, listed in order of preference, are:
 - i. **GIS shapefiles:** Shapefiles must depict the boundaries of all project areas, site characteristics, and extent of aquatic resources impacted or avoided. Each shape should be attributed with the extent/type of aquatic resources impacted. Features and boundaries should be accurate to within 33 feet (10 meters). Identify datum/projection used and if possible, provide map with a North American Datum of 1983 (NAD 83) in the California Teale Albers projection in feet.
 - ii. **KML files:** Saved from on-line mapping services. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. Include URL(s) of maps. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
 - iii. **Other electronic format:** (CAD or illustration format) that provides a context for location (inclusion of landmarks, known structures, geographic coordinates, or USGS DRG or DOQQ). Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a table with the object ID and attributed with the extent/type of aquatic resources impacted.

- iv. Aquatic resource maps marked on paper **USGS 7.5 minute topographic maps** or **Digital Orthophoto Quarter Quads (DOQQ)**; Original or legible copies are acceptable. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
- g. **Pre-project photographs:** Include a unique identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post construction conditions.
- h. **Attach additional pages as needed:** For example, if the requested information does not fit in the space provided on the form, or if you would like to provide supplemental information not requested on the NOI.

Section 9: Agent and Applicant Signature

Please sign and submit to the appropriate Regional Board. Water Board mailing addresses are located on General Order Attachment B. An original signature is required; electronic signatures are not accepted.

Attachment B
Reporting and Notification Requirements

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Report Submittal Instructions

1. Check the box on the Report and Notification Cover Sheet next to the report or notification you are submitting.
 - **Part A (Annual Report):** This report will be submitted annually from the anniversary of project effective date until a Notice of project Complete Letter is issued.
 - **Part B (Project Status Notifications):** Used to notify the Water Board of the status of the project schedule that may affect project billing.
 - **Part C (Conditional Notifications and Reports):** Required on a case by case basis for accidental discharges of hazardous materials, violation of compliance with water quality standards, notification of in-water work, or other reports.
2. Sign the Report and Notification Cover Sheet and attach all information requested for the Report Type.
3. **Electronic Report Submittal Instructions:**
 - Submit signed Report and Notification Cover Sheet and required information via email to the appropriate Water Board staff.
 - NWP 12: Submit NWP 12 Reports and Notifications to SWBNWP12@waterboards.ca.gov.

Terms

1. **Notice of Intent:** The application to enroll any project under this General. The NOI is located in attachment A.
2. **Notice of Applicability:** The authorization issued by the Water Board upon approval of the project.
3. **Effective Date:** The date the NOA is issued, or 45 days from the date the NOI is received by the Water Boards.
4. **Regulatory Measure ID:** The Water Board unique identifier for your project, provided in the NOA.
5. **Annual Reports:** A report required from dischargers with projects authorized under this General Order. Dischargers with projects authorized under NWP 5, 6, 22, 28, 32, 36 and 54 shall provide an annual report on the anniversary of the effective date. Dischargers with projects authorized under NWP 12 shall provide annual reports on January 15. If the project duration is less than one year a single annual report is required.

Map/Photo Documentation Information

When submitting maps or photos, please use the following formats.

1. **Map Format Information:**

Preferred map formats of at least 1:24000 (1" = 2000') detail (listed in order of preference):

 - **GIS shapefiles:** The shapefiles must depict the boundaries of all project areas and extent of aquatic resources impacted. Each shape should be attributed with the extent/type of aquatic resources impacted. Features and boundaries should be accurate to within 33 feet (10 meters). Identify

datum/projection used and if possible, provide map with a North American Datum of 1983 (NAD83) in the California Teale Albers projection in feet.

- **Google KML files** saved from Google Maps: My Maps or Google Earth Pro. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. Include URL(s) of maps. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
 - **Other electronic format** (CAD or illustration format) that provides a context for location (inclusion of landmarks, known structures, geographic coordinates, or USGS DRG or DOQQ). Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
 - Aquatic resource maps marked on paper **USGS 7.5 minute topographic maps** or **Digital Orthophoto Quarter Quads (DOQQ)** printouts. Maps must show the boundaries of all project areas and extent/type of aquatic resources impacted. If this format is used include a spreadsheet with the object ID and attributed with the extent/type of aquatic resources impacted.
2. **Photo-Documentation:** Include a unique identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post construction conditions.

REPORT AND NOTIFICATION COVER SHEET

Project:

Permittee:

Reg. Meas. ID:

Effective Date:

Report Type Submitted

Part A – Project Reporting

Report Type 1 ☐ Annual Report

Part B - Project Status Notifications

Report Type 2 ☐ Commencement of Construction

Report Type 3 ☐ Request for Notice of Project Complete Letter

Part C - Conditional Notifications and Reports

Report Type 4 ☐ Accidental Discharge of Hazardous Material Report

Report Type 5 ☐ Violation of Compliance with Water Quality Standards Report

Report Type 6 ☐ In-Water Work/Diversions Water Quality Monitoring Report

Report Type 7 ☐ Modifications to Project Report

Report Type 8 ☐ Transfer of Property Ownership Report

Report Type 9 ☐ Transfer of Long-Term BMP Maintenance Report

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Print Name ¹

Affiliation and Job Title

Signature

Date

¹STATEMENT OF AUTHORIZATION (include if authorization has changed since application was submitted)

I hereby authorize _____ to act in my behalf as my representative in the submittal of this report, and to furnish upon request, supplemental information in support of this submittal.

Permittee's Signature

Date

***This Report and Notification Cover Sheet must be signed by the Permittee or a duly authorized representative and included with all written submittals.**

Part A – Project Reporting

Report Type 1	Annual Report
Report Purpose	Notify the Water Boards staff of project status.
Report Contents	<p>For each project period, the annual report shall include applicable topics indicated below</p> <p><u>During the Construction Period</u></p> <ul style="list-style-type: none"> • Topic 1: Construction Summary • Topic 2: Mitigation for Temporary Impacts Status • Topic 3 NWP 12: Compensatory Mitigation for Permanent Impacts Status
Annual Report Topics (1-3)	
Annual Report Topic 1	Construction Summary
Report Contents	<ol style="list-style-type: none"> 1. Project progress and schedule including initial ground disturbance, site clearing and grubbing, road construction, site construction, and the implementation status of construction storm water best management practices (BMPs). If construction has not started, provide estimated start date and reasons for delay. 2. Map showing general project progress. 3. If applicable: <ol style="list-style-type: none"> a. Summary of Conditional Notification and Report Types 6 and 7 (Part C below).
Annual Report Topic 2	Mitigation for Temporary Impacts Status
Report Contents	<ol style="list-style-type: none"> 1. Planned date of initiation and map showing locations of mitigation for temporary impacts to waters of the state and all upland areas of temporary disturbance which could result in a discharge to waters of the state. 2. If mitigation for temporary impacts has already commenced, provide a map and information concerning attainment of performance standards contained in the restoration plan.
Annual Report Topic 3	NWP 12 Proposed Compensatory Mitigation Plan and Summary
Report Contents	<p>Part A. Proposed Compensatory Mitigation Plan</p> <ol style="list-style-type: none"> 1. A report of each permanent impact amount and location for all permanent impacts incurred through December 31 of the previous year provided in a table and as an GIS map layer that indicates the location of each impact. 2. Proposed credit purchase for the previous year's permanent impacts from a Corps approved mitigation bank or in-lieu fee program; include the name and contact information for the bank or the ILF. <p>Part B. Summary of Permanent Impacts and Mitigation</p> <ol style="list-style-type: none"> 1. For all NWP 12 projects previously authorized list the following: Regulatory Measure ID, effective date; impacted waterbody type (lake, ocean/bay/estuary, stream channel, or wetland); permanent impact quantity (acres and linear feet),

	compensatory mitigation quantity required for impacts to waters of the state (acres and linear feet) and mitigation required by CDFW for riparian impacts.
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Part B – Project Status Notifications

Report Type 2	Commencement of Construction
Report Purpose	Notify Water Boards staff prior to the start of construction.
When to Submit	Must be received at least seven (7) days prior to start of initial ground disturbance activities.
Report Contents	<ol style="list-style-type: none"> 1. Date of commencement of construction. 2. Anticipated date when discharges to waters of the state will occur.

Report Type 3	Request for Notice of Project Complete Letter
Report Purpose	Notify Water Boards staff that construction and/or any post-construction monitoring is complete, or is not required, and no further project activity is planned.
When to Submit	Must be received by Water Boards staff within thirty (30) days following completion of all project activities.
Report Contents	<p>Part A: Mitigation for Temporary Impacts</p> <ol style="list-style-type: none"> 1. A report establishing that the performance standards outlined in the restoration plan have been met for restored areas of temporary impacts to uplands and waters of the state. 2. Pre- and post-photo documentation of all restoration sites. <p>Part B: Post-Construction Storm Water BMPs</p> <ol style="list-style-type: none"> 3. Date of storm water Notice of Termination(s), if applicable. 4. Report status and functionality of all post-construction BMPs.

Part C – Conditional Notifications and Reports

Report Type 4	Accidental Discharge of Hazardous Material Report
Report Purpose	Notifies Water Boards staff that an accidental discharge of hazardous material has occurred.
When to Submit	Within five (5) working days following the date of an accidental discharge. Continue reporting as required by Water Boards staff.
Report Contents	<ol style="list-style-type: none"> 1. The report shall include the OES Incident/Assessment Form, a full description and map of the accidental discharge incident (i.e. location, time and date, source, discharge constituent and quantity, aerial extent, and photo documentation). If applicable, the OES Written Follow-Up Report may be substituted. 2. If applicable, any required sampling data, a full description of the sampling methods including frequency/dates and times of sampling, equipment, locations of sampling sites. 3. Locations and construction specifications of any barriers, including silt curtains or diverting structures, and any associated trenching or anchoring.

Report Type 5	Violation of Compliance with Water Quality Standards Report
Report Purpose	Notifies Water Boards staff that a violation of compliance with water quality standards has occurred.
When to Submit	The Permittee shall report any event that causes a violation of water quality standards within three (3) working days of the noncompliance event notification to Water Boards staff.
Report Contents	The report shall include: the cause; the location shown on a map; and the period of the noncompliance including exact dates and times. If the noncompliance has not been corrected, include: the anticipated time it is expected to continue; the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance; and any monitoring results if required by Water Boards staff.

Report Type 6	In-Water Work and Diversions Water Quality Monitoring Report
Report Purpose	Notifies Water Boards staff of the completion of in-water work.
When to Submit	Within three (3) working days following the completion of in-water work. Continue reporting in accordance with the approved water quality monitoring plan.
Report Contents	As required by the approved water quality monitoring plan.

Report Type 7	Modifications to Project Report
Report Purpose	Notifies Water Boards staff if the project, as described in the application materials, is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority.
When to Submit	If project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or

	federal regulatory authority.
Report Contents	A description and location of any alterations to project implementation. Identification of any project modifications that will interfere with the Permittee's compliance with the Order.

Report Type 8	Transfer of Property Ownership Report
Report Purpose	Notifies Water Boards staff of change in ownership of the project or Permittee-responsible mitigation area.
When to Submit	At least 10 working days prior to the transfer of ownership.
Report Contents	<ol style="list-style-type: none"> 1. A statement that the Permittee has provided the purchaser with a copy of the Order and that the purchaser understands and accepts: <ol style="list-style-type: none"> a. the Order's requirements and the obligation to implement them or be subject to administrative and/or civil liability for failure to do so; and b. responsibility for compliance with any long-term BMP¹ maintenance plan requirements in this Order. 2. A statement that the Permittee has informed the purchaser to submit a written request to the Water Boards to be named as the permittee in a revised order.

Report Type 9	Transfer of Long-Term BMP Maintenance Report
Report Purpose	Notifies Water Boards staff of transfer of long-term BMP maintenance responsibility.
When to Submit	At least 10 working days prior to the transfer of BMP maintenance responsibility.
Report Contents	A copy of the legal document transferring maintenance responsibility of post-construction BMPs.

¹ Best Management Practices (BMPs) is a term used to describe a type of water pollution or environmental control.

Attachment C
Project Maps

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Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

Office of Public Affairs: (916) 341-5254
Office of Legislative Affairs: (916) 341-5251
Office of the Ombudsman: (916) 341-5254

P.O. Box 100, Sacramento, CA 95812-0100
www.waterboards.ca.gov

Water Quality information: (916) 341-5455
Water Rights information: (916) 341-5300
Financial Assistance information: (916) 341-5700

NORTH COAST REGION (1)

www.waterboards.ca.gov/northcoast

5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
E-mail: info1@waterboards.ca.gov
Tel: (707) 576-2220
Fax: (707) 523-0135

SAN FRANCISCO BAY REGION (2)

www.waterboards.ca.gov/sanfranciscobay

1515 Clay Street, Suite 1400
Oakland, CA 94612
E-mail: info2@waterboards.ca.gov
Tel: (510) 622-2300
Fax: (510) 622-2460

CENTRAL COAST REGION (3)

www.waterboards.ca.gov/centralcoast

895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
E-mail: info3@waterboards.ca.gov
Tel: (805) 549-3147
Fax: (805) 543-0397

LOS ANGELES REGION (4)

www.waterboards.ca.gov/losangeles

320 W. 4th Street, Suite 200
Los Angeles, CA 90013
E-mail: info4@waterboards.ca.gov
Tel: (213) 576-6600
Fax: (213) 576-6640

CENTRAL VALLEY REGION (5)

www.waterboards.ca.gov/centralvalley

11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670
E-mail: info5@waterboards.ca.gov
Tel: (916) 464-3291
Fax: (916) 464-4645

Fresno Branch

1685 E Street
Fresno, CA 93706
Tel: (559) 445-5116
Fax: (559) 445-5910

Redding Branch

364 Knollcrest Drive, Suite 205
Redding, CA 96002
Tel: (530) 224-4845
Fax: (530) 224-4857

LAHONTAN REGION (6)

www.waterboards.ca.gov/lahontan

2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
E-mail: info6@waterboards.ca.gov
Tel: (530) 542-5400
Fax: (530) 544-2271

Victorville Branch

15095 Amargosa Road - Bldg 2, Ste 210
Victorville Ca 92394
Tel: (760) 241-6583
Fax: (760) 241-7308

COLORADO RIVER BASIN REGION (7)

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73-720 Fred Waring Dr., Suite 100
Palm Desert, CA 92260
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Fax: (760) 341-6820

SANTA ANA REGION (8)

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3737 Main Street, Suite 500
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E-mail: info8@waterboards.ca.gov
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Fax: (951) 781-6288

SAN DIEGO REGION (9)

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★ State Water Board (Headquarters)

Felicia Marcus, Chair
1001 I STREET

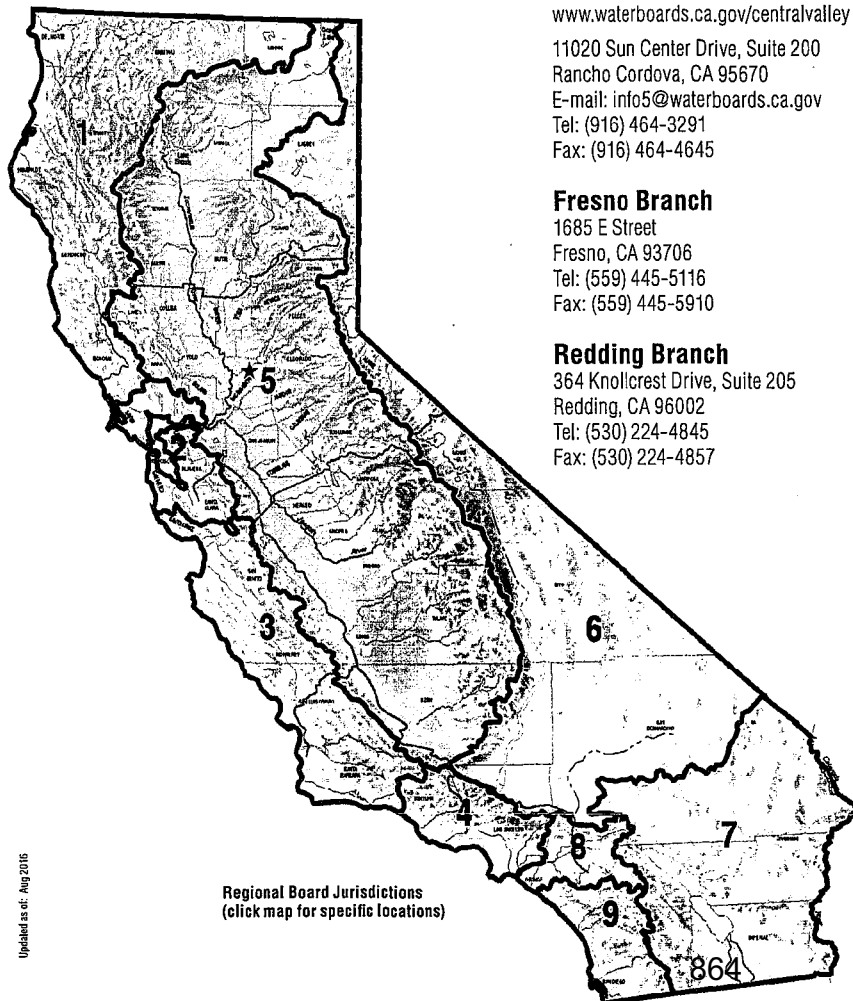
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STATE OF CALIFORNIA
Edmund G. Brown Jr., Governor

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
Matthew Rodriguez, Secretary

STATE WATER RESOURCES CONTROL BOARD
Thomas Howard, Executive Director

STATE WATER RESOURCES CONTROL BOARD
Cris Carrigan, Director, Office of Enforcement



Regional Board Jurisdictions
(click map for specific locations)

Attachment D
Signatory Requirements

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SIGNATORY REQUIREMENTS

*All Documents Submitted In Compliance With This Order
Shall Meet The Following Signatory Requirements:*

1. All applications, reports, or information submitted to the Water Board must be signed and certified as follows:
 - a) For a corporation, by a responsible corporate officer of at least the level of vice-president.
 - b) For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 - c) For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
2. A duly authorized representative of a person designated in items 1.a through 1.c above may sign documents if:
 - a) The authorization is made in writing by a person described in items 1.a through 1.c above.
 - b) The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c) The written authorization is submitted to the State Water Board Staff Contact prior to submitting any documents listed in item 1 above.
3. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

EXHIBIT “21”

GAVIN NEWSOM
GOVERNORJARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

TO: Kari Holmes, P.E.
Supervising Engineer
Compliance and Enforcement Section

FROM: Kenny Croyle
Water Resource Control Engineer
Compliance and Enforcement Section

DATE: 7 December 2020

SUBJECT: Review of *Revised Storm Water System Investigation Findings Report*,
California Department of Corrections and Rehabilitations, Mule Creek State
Prison, Amador County

1: Background and Introduction

On 14 February 2018 the Assistant Executive Officer issued a Water Code 13267 Order based on sample results from the stormwater system that contained both domestic and industrial waste constituents. The 13267 Order required, in part, that the California Department of Corrections and Rehabilitation (CDCR, Discharger) submit a workplan to investigate the stormwater system and submit a report describing the findings of that investigation. The 13267 Order contained specific requirements for the *Storm Water Collection System Investigation Findings Report*. On 15 March 2018 CDCR submitted the *Storm Water System Investigation Workplan* (Investigation Workplan) for the Mule Creek State Prison facility (MCSP). Board staff conditionally approved the workplan on 26 March 2018 (Conditional Approval). The Discharger submitted a letter of concurrence with those conditions prior to initiating the described work. On 17 August 2018 the Discharger submitted the *Storm Water Collection System Investigation Findings Report*. Board staff met with the Discharger several times and provided draft written comments (Draft Comments) on this report in October 2018. In response to those comments the Discharger performed additional investigations, culminating in a *Revised Storm Water Collection System Investigation Findings Report* (Report) submitted on 1 November 2019.

While the investigation was being conducted the Executive Director of the State Water Resources Control Board adopted Water Quality Order 2013-0001-DWQ on April 24, 2019, which directed MCSP to submit a Notice of Intent to apply for coverage under the Small MS4 General Permit. The Discharger complied, and the facility is currently covered under the Small MS4 General Permit.

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

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MCSP0031305

2: Review of Findings and Evaluation of Investigation Completeness

Board staff has reviewed the Report and found that the Discharger has identified several likely sources non-stormwater flows entering the stormwater system, as well as potential sources of the documented waste constituents. The Discharger concludes with several recommendations based on these findings.

Board staff's review of the Report presented below evaluates compliance with each requirement of the investigation based on the 13267 Order and the conditional approval of the investigation workplan. The review also includes Board staff's analysis of the data presented in the Report and a comparison of CDCR and Board Staff's conclusions and recommendations based on that data.

2.1: Stormwater and Sanitary Sewer Collection Systems Survey and Mapping

The Discharger appears to have thoroughly mapped the stormwater collection system. In response to the Draft Comments regarding the condition of the sanitary sewer system, the sewer system was also mapped to some extent, roughly between the edge of the buildings to the edge of the perimeter fence. The sewer lines that were mapped and investigated consist almost entirely of plastic pipe, whereas the Discharger has stated that sewer pipes under the buildings were constructed with ductile iron pipe. Board staff has previously voiced concerns regarding the condition of the ductile iron sewer pipes under the buildings. This is still a major concern, and is discussed further below.

A major finding of the survey and mapping is that the sanitary sewer system was constructed above the stormwater system in most areas of the prison. In some areas the pipes buried very short distanced from each other, both vertically and horizontally. The Report states that in many areas the vertical separation is within just a few feet:

"The vertical separation of the lines at the crossing is within 1 foot, with the stormwater collection line likely underneath the sanitary sewer because invert elevations at the crossings are nearly identical."

"The vertical separation between the stormwater collection line and sanitary sewer ranges from approximately 0.3 feet to 1.2 feet below the sanitary sewer line between the SSMH-105 to SSMH-107 segment. In this segment, the sanitary sewer line is at a higher elevation compared with the stormwater collection line."

"The vertical separation between the stormwater collection and sanitary sewer lines ranges from approximately 4 feet at SSMH-109 to less than 1 foot at SSMH-105, with an average of 2 feet of vertical separation in the segment between SWMH-507A and SWMH-507B"

The Report indicates that horizontal separation between sewer and stormwater lines can be as little as 4 feet in some sections, and in general they are within 7 and 25 feet when running in parallel.

The Report acknowledges that indirect cross connections between the two systems is possible given their close proximity. However, it concludes this is unlikely due to the horizontal distances between the pipes, the gravity flow nature of the systems, lack of co-located pipe defects, and the clay type soils. This analysis does not take into account the for the fact that groundwater data shows the systems are below the water table, the existence of multiple French drain segments in the stormwater system, or the potential conduits created when pipe trenches were backfilled with material that could be more hydraulically conductive than native clays. Some CCTV footage shows gravel visible through defects in the pipe. Board staff believe that these factors are aiding in the formation of indirect cross connections.

2.2: Maintenance Logs and Timeline of Changes

The review of stormwater system maintenance logs revealed only jetting and unblocking activities. There were no records of repairs or breaks in the system. It was noted that an area incorrectly referred to as a wash pad had been plumbed to the stormwater system. It was not described what wash down activities occurred, or what processes or equipment they were associated with. The area was replumbed to the sanitary sewer in November 2017, during the time frame of the initial complaint. The drain line was later capped and water supply shut off in July 2018 to prevent wash down activities in this location.

The review of sanitary sewer system maintenance logs revealed primarily jetting and auguring to clear blockages, and also included 3 pipe breaks and subsequent repairs in 2014 and 2015. These logs did not appear to include the numerous issues verbally discussed by CDCR staff in the field or in meetings related to the hydronic loop pipe breaks. The hydroponic loop was a separate underground pressurized pipe system that delivered near boiling hot water from a central boiler to various buildings in the Old Prison facility. Several CDCR staff, including the Deputy Warden, stated on multiple occasions that pipe breaks within the hydroponic loop had occurred intermittently for years. These breaks resulted in the subsurface discharge of pressurized near boiling water, which boiled to the surface and melted other nearby underground plastic pipes and utilities including the sanitary sewer and stormwater systems. This was supported by defects observed in the CCTV footage, as well as by video evidence from the original complaint showing steaming hot water discharging from stormwater laterals into the perimeter ditch during dry weather conditions. The Report provides further evidence, identifying 11 areas where bulging of pipes exist in the sewer system, and in some cases 80% of the pipe was obstructed. However, the Report concludes that none of the bulges have created holes or cracks in the pipes. Board staff is concerned that these pipe breaks and possibly repairs have not been adequately addressed and documented.

A list of major changes to the systems was also provided:

- The hydronic loop was taken out of service in April 2018;
- Procedures to shut down the leaking pressurized irrigation system when not in use during 2019;
- A facility wide memorandum prohibiting wash down of paved areas and other illicit discharges to the stormwater system in 2018.

While all these changes are good steps to reducing non-stormwater flows in the stormwater system, it is unclear how effective the memorandum will be and where washdown procedures now take place. The Discharger has stated in the past that it is difficult to prevent these practices due to the “size and attitude” of the prisoner population. This issue will need to be addressed more aggressively going forward under the MS4 permit.

2.3: Stormwater Collection and Sanitary Sewer Collection Systems Physical Assessments

2.3.1: Closed Circuit Television (CCTV) of Stormwater and Sanitary Sewer Systems

Between 2018 and 2019 the Discharger inspected approximately 35,000 lineal feet of sanitary sewer system and 24800 lineal feet of stormwater system. Hundreds of defects were noted in each system, but many were described as “seal intact”, “seal likely intact”, “invert intact”, “corrosion minor”, etc. Board staff has reviewed the list of defects and summarized the number of defects in each system below that are likely contributing to infiltration and exfiltration of the systems. The defects summarized include pipe breaks, holes, and joint separations or defects noted as “appears compromised”, “likely compromised”, “seal possibly poor”, etc. It should be noted that the vast majority of the plumbing under the buildings which primarily consists of small diameter ductile or cast iron pipe (both are referenced in the Report) was not investigated, and therefore is not captured here.

Table 1: Summary of Defects Likely to Cause Infiltration or Exfiltration

	Joint Defects/ Separations, Roots, and Likely Compromised Seals	Pipe Breaks, Cracks, and Holes	Joint Defects/Separations, Cracks, and Holes where Soil was Visible	Infiltration Staining (no specific defect)	Active Infiltration	Perforated Pipes including French Drains
Stormwater System	90	34	32	18	4	6
Sanitary Sewer	60	22	13	8	3	N/A

The Report states, in part, the following major findings related to the stormwater system:

- No direct cross connections between the sanitary sewer and stormwater system were discovered;
- The system exhibits defects consistent with aging infrastructure, proximity to former hot water hydronic lines, and some poor installation practices;
- Discovery of a slotted pipe in the stormwater system between SWMH-509 and SWMH-510 with groundwater dripping into the stormwater collection line;
- CTC building French drain and sump pumps that both direct groundwater into the stormwater collection system;
- Communication/electrical vault sump pumps discharge infiltrating groundwater to the stormwater collection system. Sample results showed waste constituents present in vault water;
- Documented subsurface leaks in the irrigation system supported by relationship between when the irrigation system is charged and measured flow in the stormwater collection system;
- Numerous cracks and joint defects likely contribute minimal infiltration.

The Report states, in part, the following major findings related to the sanitary sewer system:

- The entire sanitary sewer line from SSMH-210 to SSMH-205 is undersized and in poor condition;
- Several large segments of the sewer have large joint separations that presents a potential threat to impact groundwater;
- Deformations caused by the hydronic loop are not sources of exfiltration.
- Joint defects were the most prevalent type of defect system;
- No significant corrosion was observed in the ductile iron lateral lines located under the buildings. Moderate corrosion was discovered, and all pipe appears to be intact;
- PVC-to-cast-iron connections where newer housing buildings were tied in to existing sewer systems were poorly installed, leading to significant defects.

Based on Board staffs review of the findings of the Report and the CCTV footage, there are numerous locations in both systems where infiltration and exfiltration are likely occurring. Staining from infiltration and active infiltration was observed in both systems, in addition to large cracks, holes, joint defects, and joint separations where soil was visible were found providing obvious conduits for indirect cross connections. Much of the CCTV work was conducted during the dry season, meaning that the observed active infiltration supports that much of the piping in both systems is submerged in groundwater year-round. Because the perimeter stormwater ditch completely encircles the Old Prison, and because much of both systems within the prison is at a higher elevation than the bottom of this trench, Board staff conclude that groundwater is artificially mounded beneath the Old Prison. This is likely caused by leaks in the sanitary sewer system, stormwater system, irrigation system, and percolating irrigation water.

Additionally, several sections of the stormwater system include perforated pipe by design for sub surface drainage. This provides an additional potential indirect cross connection given the condition of the sanitary sewer system.

Although the Discharger reports that *"the extent of the corrosion observed appeared typical for 30-year-old ductile iron pipe but was not excessive"*, and that *"pipe material was observed to be intact"*, Board staff's review of the CCTV footage determined that these conclusions are difficult to support from the footage. The corrosion in some areas appeared bad enough on the sides of the pipe to have possibly compromised the invert, but due to debris, deposits, and wastewater in the pipe it is impossible to tell. Additionally, the documented high groundwater is likely causing corrosion on the outside of the pipes as well, further compromising their integrity.

2.3.2: Smoke Test

Smoke testing of the sanitary sewer system revealed 7 locations where smoke escaped through concrete seams in the ground, 2 locations where it escaped through grass in landscaped areas near buildings, and one location near a Stormwater system manhole. Upon inspection it appears the smoke escaped from the sanitary sewer system, traveled subsurface to a location near the Stormwater manhole, and then entered the manhole around the poorly sealed grade ring just below the manhole cover. Although this is not irrefutable evidence of a direct cross connection, it is evidence that an indirect cross connection can form and that more likely exist throughout the collocated systems.

2.3.3: Dye Tests

Dye testing was performed on a several locations around the facility, including the meat processing area and loading docks. No evidence of direct cross connections was found. However indirect cross connections would be difficult to detect using dye, especially in dry weather conditions when the stormwater system has low or very low flows.

2.4: Observed Facility Practices

The investigation identified a list of observed practices that have been contributing non-stormwater flows in the stormwater system. These practices included:

- *"Wash-down of loading docks in Center Corridor (possible use of surfactants)*
- *Vehicle and equipment wash downs (recycle yard)*
- *Dumping of mop buckets outside and/or in stormwater DIs (drop inlets)*
- *Excessive irrigation water runoff*
- *Improper or delayed maintenance of stormwater DIs*
- *Construction practices that impact stormwater DIs*
- *Trash and debris not cleaned in timely manner (Center Corridor, Interior Perimeter, and recycle yard)*
- *Dumpsters leaking (Center Corridor)*

- *Delayed maintenance of asphalt and concrete (Center Corridor and Interior Perimeter Road)*
- *Use of stormwater DI at landscaping yard as a wash pad*

These practices likely contributed to the detection of waste constituents in the stormwater discharges, including industrial constituents such as surfactants, VOCs (including trihalomethanes), SVOCs, COD, metals, and herbicides.

3: Stormwater System and Sewer System Sampling Results

Approximately 600 water samples were collected from the stormwater system since January 2018. Tables 2 through 8 below summarize the number of samples, number of detections, the detections over applicable water quality objectives, and the maximum concentration detected. Applicable water quality objectives may include Primary MCLs, Secondary MCLs, Basin Plan Objections, Numerical Action Limits, or Public Health Goals depending on the constituent. These are used here qualitatively to evaluate threat to water quality. It should be noted that for some constituents the maximum concentrations noted here were significantly higher than the next highest concentration reported for some constituents. However, based on the variability of the data and the nature of the potential waste sources (i.e. washdown, dumping of mop buckets, etc.) Board staff believe many of these maximum concentrations to be accurate, and not errors. In fact, the large variability of the data suggests true maximum concentrations could be significantly higher. Variation in the dilution of the discharge is also a big factor. This high variability in water quality makes it difficult to determine the exact source of certain waste constituents, the number of detections over the water quality objectives illustrates that threat to surface water and groundwater.

Table 2: General Chemistry Parameters Detection Summary

Constituent	Number of Samples	Number of Detections	Detections Over WQO	Water Quality Objective (mg/L)	Max Concentration (mg/L)
Ammonia	566	59	4	1.5	2.6
Total Alkalinity	560	560	547	20	720
BOD	566	184	8	30	140
Chloride	560	554	1	106	250
Specific Conductance	509	509	1	900	922
Nitrate as N	527	495	1	10	12
Nitrite as N	514	205	2	1	4
pH (ph Units)	510	510	45	6.5-8.5	5.75, 11
Settleable Solids	508	61	1	1	7
TDS	560	560	3	500	800
TSS	566	499	45/13	100/400	4200
Phosphorus	515	441	441	0.0001	11

BOD, nitrate, nitrite, and phosphorous are typical of domestic wastewater, especially at higher concentrations like those seen at maximum concentrations. Alternatively, high alkalinity and pH is typical of many industrial waste streams. Ammonia is a common constituent in both domestic wastewater and cleansers. In particular, the frequency at which BOD, pH, and phosphorous concentrations exceeded water quality objectives indicate that the discharge from the stormwater system is a threat to water quality. The Report suggests that the high phosphorous may also be a byproduct of the “the extensive use of glyphosate” at the facility (see comments on Table 5 below).

Table 3: Microbial Parameters Detection Summary

Constituent	Number of Samples	Number of Detections	Detections Over WQO	Water Quality Objective (MPN/100ml)	Max Concentration (MPN/100ml)
Total Coliforms	571	568	N/A	N/A	>160,000
Fecal Coliforms	571	551	534	200 MPN/100ml	160,000
E. Coli	581	559	553	N/A	72,700

Although, as the Report states, coliforms can come from many sources other than human waste, it is important to note that the Basin Plan Water Quality Objective of a 200 MPN/100ml geometric mean (based on no less than 5 samples over 30 days) for fecal coliforms in surface water does not specify that the limit is restricted to human sources. Fecal coliforms, regardless of source, are subject to this Water Quality Objective. Nearly 95% of the almost 600 samples collected from the stormwater system are higher than this objective. Regardless of whether these detections are caused by human waste or not, they indicate a threat to water quality and must be addressed.

Table 4: Total Metals Detection Summary

Constituent	Number of Samples	Number of Detections	Detections Over WQO	Water Quality Objective (ug/L)	Max Concentration (ug/L)
Aluminum	563	563	253	200	470000
Antimony	509	79	1	6	16
Arsenic	561	536	86	10	30
Chromium	561	398	5	50	120
Iron	563	517	391	300	140000
Lead	561	179	3	15	160
Magnesium	563	562	562	64	50000
Manganese	509	328	84	50	1400
Molybdenum	390	384	6	10	12
Nickel	509	475	1	100	120
Sodium	561	561	247	20000	218000
Vanadium	435	407	5	50	160

The majority of metals detected were either typical industrial stormwater constituents or were infrequently detected over the applicable water quality objective. Aluminum, iron, and magnesium are common at industrial sites and naturally occurring in soils underlying the site. The relatively common exceedances of water quality objectives for arsenic, copper and manganese were not explained.

Sources were not identified for other metals that had high maximum concentrations but infrequently exceeded water quality objectives, such as nickel, vanadium, and chromium.

Table 5: Industrial Stormwater Parameters Detection Summary

Constituent	Number of Samples	Number of Detections	Detections Over WQO	Water Quality Objective	Max Concentration
COD (mg/l)	510	298	27	120	11000
MBAS (mg/l)	515	186	12	0.5	13
Oil & Grease (ug/l)	562	203	0/4	15/255	650
TPHD (ug/l)	562	99	92	56	1600
TPHG (ug/l)	250	1	1	5	64
Caffeine (mg/l)	2	2	N/A	N/A	230
Glyphosate ug/L	4	4	4	700	2100
Tryiclopyr	4	1	N/A	N/A	17.7

Chemical oxygen demand (COD) varied greatly in the sample data, from non-detect to 11,000 mg/L. High COD is common in industrial wastewater, and these fluctuating concentrations suggest slugs of industrial wastewater caused by poor washdown practices or possible dumping of wastes. The detections of MBAS indicates surfactants, which are also point to poor equipment cleaning and washdown practices.

Oil and Grease, Diesel, and gasoline range organics suggest poor housekeeping practices related to the vehicles and other engine powered equipment being operated or maintained outside.

Caffeine was detected in both of the stormwater samples analyzed, with a maximum of 230 mg/L. The source is almost certainly industrial wastewater or associated washdown water from the coffee roasting operation on site. For reference, Starbucks brewed coffee has a caffeine concentration of approximately 912 mg/L¹. Even diluted, the stormwater contained roughly a quarter of the caffeine concentration as a cup of coffee at that time. This is clear evidence of a significant amount of industrial waste entering the stormwater system.

Tryiclopyr and glyphosphate were detected in irrigation runoff from the yards. Glyphosate was detected at 3 times the MCL (2100 ug/L). Although this was dismissed as an outlier, this is not statistically appropriate given the sample size of 4, with one of the other sample results being nearly double the MCL (1300 ug/L). This is likely caused by the "extensive use" of glyphosate as an herbicide at the facility, which is described briefly in the Report.

¹ <https://www.caffeineinformer.com/the-complete-guide-to-starbucks-caffeine>

Table 6: Volatile Organic Compounds Detection Summary

Constituent	Number of Samples	Number of Detections	Detections Over WQO	Water Quality Objective (ug/L)	Max Concentration (ug/L)
Benzene	561	2	0	1	0.42
Toluene	561	4	0	40	1.7
Ethylbenzene	561	2	0	30	1.7
Total xylenes	561	6	0	20	4.8
Chloroform	457	26	0	80	11
Bromoform	457	2	0	80	2.1
Dibromochloromethane	457	1	0	80	0.97
Bromodichloromethane	457	1	0	80	0.78
Dichlorodifluoromethane	457	3	0	0.19	5.5
Trichlorofluoromethane	457	1	0	150	1.1
Acetone	457	51	0	300	33
Methyl Ethyl Ketone	457	7	0	4000	1.8
Naphthalene	457	2	0	0.29	0.71

13 species of VOCs were detected, including refrigerants, solvents, and disinfection byproducts. Of the 108 detections of VOCs 51 were acetone which is a common solvent related to industrial activity. Although acetone is also a common lab contaminant, CDCR staff stated they worked with their lab to confirm these detections were accurate, and believe they are not caused by lab contamination. Acetone is also common in industrial degreasers and cleaners which are commonly used at the facility in its industrial processes, as described in the WDRs. Another 26 were chloroform, which is a disinfection byproduct common in treated drinking water. Results from the domestic water supply sampling showed the average chloroform in the source water had a maximum concentration of 27 ug/L, over double what was detected in the stormwater system. Because this is the source potable water for the entire facility, and chloroform volatilizes and breaks down over time, this information is not detailed enough to determine if the source of chloroform in the stormwater is irrigation runoff or infiltration from leaking sewer or potable water pipes. Most likely it is some combination of these things based on the various other waste constituents detected. While the presence of VOCs in stormwater is evidence of non-stormwater sources, only a handful of detections exceeded Water Quality Objectives.

Table 7: Semi Volatile Organic Compounds Detection Summary

Constituent	Number of Samples	Number of Detections	Detections Over WQO	Water Quality Objective (ug/L)	Max Concentration (ug/L)
Benzoic Acid	365	4	0	28000	11
Bis (2-chloroethyl) ether	365	2	2	0.014	0.53
Bis (2-ethylhexyl) phthalate	365	6	5	4	18
Butyl benzyl phthalate	365	2	2	0.1	13
Di-n-butyl phthalate	365	10	2	3	3.1
Di-n-octyl phthalate	365	1	1	3	3
Diethyl phthalate	365	13	0	3	1.2
Pentachlorophenol	365	3	3	1	10
Phenol	365	1	1	1	1.4

Semi volatile organic compounds were detected infrequently, but a relatively large portion of those detections exceeded water quality objectives. This is due to water quality objectives being very near the detection limit of the analytical methods. No source of the SVOCs was identified in the Revised Findings Report. Typical sources include various industrial and agricultural activities.

4: Surface Water Sampling from Mule Creek

The Report had limited data for upstream and downstream data from 18 paired samples. Given the transient and variable nature of surface water sampling, especially during rain events when the facility was discharging to Mule Creek, it is difficult to evaluate the full effect of the impacts on the creek with this small data set.

The Report analyzed the data sets as a whole, relying on averages, maximum concentrations, and the number of times water quality objectives were exceeded to determine impacts to the creek. Averaging data is not appropriate for determining the impact that the facility's discharge has on the creek during discharge, especially given the variable character of the discharge and high maximum concentrations seen in the stormwater sampling data. Upstream/downstream sample sets for individual events should be compared in order to accurately establish impacts for a single discharge event.

Paired upstream and downstream samples collected during wet weather discharge events clearly show there are significant impacts to downstream water were occurring, even when the discharge is diluted by runoff. Tables 8, 9, and 10 below summarize a subset of that data and demonstrate those impacts by comparing upstream/downstream sample pairs. Values in bold indicate downstream concentrations that are high than the upstream counterparts in the same sample pair.

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Table 8: Organic and Microbial Constituents Comparison in Mule Creek during Discharge

Date	Sample Location in Mule Creek	Organic Constituents		Microbial Constituents		
		Oil and Grease (mg/l)	Volatile Organic Compounds (ug/L)	Fecal Coliforms (MPN/100ml s)	Total Coliforms (MPN/100ml s)	E. Coli (MPN/100ml s)
3/23/18	upstream	1.3	–	>1,600	>1,600	>1,600
	downstream	1.3	–	>1,600	>1,600	>1,600
4/6/18	upstream	<5.0	ND	240	> 1,600	151.5
	downstream	1.4 J	ND	> 1,600	> 1,600	>2419.6
4/7/18	upstream	2.3 J	ND	> 1,600	> 1,600	>2,419.6
	downstream	1.7 J	ND	> 1,600	> 1,600	1,732.90
4/11/18	upstream	<5.0	ND	49	> 1,600	118.7
	downstream	<5.0	ND	130	350	172.2
4/27/18	upstream	<5.0	ND	170	1,600	113.7
	downstream	2.9J	ND	540	> 1,600	178.9
5/25/18	upstream	<5.0	ND	1,600	>1,600	1,986.30
	downstream	<5.0	acetone = 5.5	>1,600	>1,600	>2,419.6
5/26/18	upstream	1.5 J	ND	>1,600	>1,600	1,986.30
	downstream	2.8 J	acetone = 2.7 J; chloroform = 1.1	>1,600	>1,600	>2,419.6
12/17/18	upstream	<5.0	ND	3500	24000	1553
	downstream	1.7 J	ND	11,000	>160,000	1,986.30
12/26/18	upstream	<5.0	ND	540	9200	387
	downstream	<5.0	ND	2200	24000	1046
1/5/19	upstream	2.1 J	ND	79	2600	50
	downstream	Not sampled	Not sampled	Not sampled	Not sampled	Not sampled
1/15/19	upstream	<5.0	ND	240	16000	86
	downstream	1.4 J	ND	4600	16000	1986
1/20/19	upstream	<1.4	ND	2200	11000	1203
	downstream	<1.4	ND	>1,600	160000	2790
2/2/19	upstream	1.4 J	ND	1700	16000	1203
	downstream	<1.4	ND	3500	28000	2320
2/10/19	upstream	1.7 J	ND	1700	16000	1203
	downstream	<1.4	ND	920	35000	3550
2/13/19	upstream	<1.4	ND	3500	35000	3130
	downstream	<1.4	ND	2300	13000	770
2/26/19	upstream	<1.4	ND	1100	2200	1300
	downstream	<1.4	ND	540	17000	365
3/20/19	upstream	1.6 J	ND	33	920	98.5
	downstream	<1.4	ND	220	1400	101
3/27/19	upstream	1.5 J	ND	310	5400	193
	downstream	<1.4	ND	130	2400	57.6
4/5/19	upstream	2.8 J	ND	140	9200	114
	downstream	3.2 J	ND	220	2600	96

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Table 9: General Parameters Comparison in Mule Creek during Discharge

General Parameters						
Date	Sample Location in Mule Creek	Total Dissolved Solids (mg/L)	Turbidity (NTUs)	Sulfate as SO ₄ (mg/L)	Total Nitrogen (mg/L)	Biological Oxygen Demand (mg/L)
3/23/18	upstream	130	24	7.7	0.63	<10
	downstream	150	26	8.2	0.69	<10
4/6/18	upstream	190	3.9	17	1.1	2.0J
	downstream	220	23	26	1	2.8J
4/7/18	upstream	120	30	7.2	1.1	3.4J
	downstream	140	40	9.3	1.2	3.4J
4/11/18	upstream	210	1.9	13	<1.0	<5.0
	downstream	220	5.6	15	<1.0	<5.0
4/27/18	upstream	250	1.1	16	<1.0	<5.0
	downstream	260	1.8	18	<1.0	<5.0
5/25/18	upstream	260	0.79	12	<1.0	<5.0
	downstream	120	68	39	3.4	7.1
5/26/18	upstream	250	0.54	11	<1.0	<5.0
	downstream	120	56	26	1.8	2.9J
12/17/18	upstream	470	Not Analyzed	100	<1.0	<5.0
	downstream	170	Not Analyzed	36	3	3.7 J
12/26/18	upstream	220	Not Analyzed	75	1	<5.0
	downstream	380	Not Analyzed	18	1.3	2.0 J
1/5/19	upstream	340	Not Analyzed	50	<1.0	<5.0
	downstream	Not Sampled	Not sampled	Not sampled	Not sampled	Not sampled
1/15/19	upstream	270	Not Analyzed	39	<1.0	<5.0
	downstream	130	Not Analyzed	30	1.8	3.7 J
1/20/19	upstream	170	Not Analyzed	16	3	<2.0
	downstream	180	Not Analyzed	21	2.2	2.1 J
2/2/19	upstream	220	Not Analyzed	23	1.9	3.6 J
	downstream	160	Not Analyzed	26	1.4	2.8 J
2/10/19	upstream	120	Not Analyzed	10	1.8	2.5 J
	downstream	130	Not Analyzed	12	1.8	2.2 J
2/13/19	upstream	150	Not Analyzed	13	1.8	<2.0
	downstream	130	Not Analyzed	12	1.2	<2.0
2/26/19	upstream	160	Not Analyzed	16	1.4	<2.0
	downstream	170	Not Analyzed	22	1.2	<2.0
3/20/19	upstream	190	Not Analyzed	16	<0.20	<2.0
	downstream	200	Not Analyzed	21	<0.20	<2.0
3/27/19	upstream	160	Not Analyzed	15	<0.20	<2.0
	downstream	190	Not Analyzed	17	<0.20	<2.0
4/5/19	upstream	180	Not Analyzed	14	3.7	<2.0
	downstream	200	Not Analyzed	17	1.3	<2.0

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Table 10: Metal Constituents Comparison in Mule Creek during Discharge

Date	Sample Location in Mule Creek	Aluminum (ug/L)	Chromium (ug/L)	Copper (ug/L)	Iron (ug/L)	Lead (ug/L)	Manganese (ug/L)	Zinc (ug/L)
3/23/18	upstream	940	3.7	–	1200	<1.0	36	6.3
	downstream	1200	3.5	–	1300	1.4	28	5.7
4/6/18	upstream	110	<2.0	2.4	320	<1.0	31	<20
	downstream	620	<2.0	3.5	700	0.81J	36	9.2J
4/7/18	upstream	1000	5.3	6.4	2300	0.66J	83	<20
	downstream	1800	6	8	3200	4	87	9.0J
4/11/18	upstream	45	<2.0	2.2	190	<1.0	<20	<20
	downstream	140	<2.0	2.5	410	<1.0	27	<20
4/27/18	upstream	<40	<2.0	<2.0	<100	<1.0	30	<20
	downstream	29J	<2.0	–	180	0.24J	<20	<20
5/25/18	upstream	<40	<2.0	<2.0	<100	<1.0	43	<20
	downstream	1600	4.1	15	2100	<1.0	76	180
5/26/18	upstream	<40	<2.0	<2.0	<100	<1.0	13J	<20
	downstream	1200	3.8	14	1800	0.67J	34	70
12/17/18	upstream	<40	<2.0	Not Analyzed	<100	<1.0	Not Analyzed	<20
	downstream	380	<2.0	Not Analyzed	4800	1.6	Not Analyzed	49
12/26/18	upstream	39J	<2.0	Not Analyzed	70 J	2.2	Not Analyzed	<20
	downstream	740	<2.0	Not Analyzed	2100	24	Not Analyzed	11 J
1/5/19	upstream	100	<2.0	Not Analyzed	180	<1.0	Not Analyzed	<20
	downstream	Not Sample	Not sample	Not sample	Not sample	Not sample	Not sampled	Not sampled
1/15/19	upstream	20	<2.0	Not Analyzed	<100	<1.0	Not Analyzed	<20
	downstream	2100	5.3	Not Analyzed	4300	2.1	Not Analyzed	130
1/20/19	upstream	390	<2.0	Not Analyzed	650	0.47 J	Not Analyzed	<8.0
	downstream	3000	4.7	Not Analyzed	1900	1.1	Not Analyzed	37
2/2/19	upstream	140	<2.0	Not Analyzed	320	<0.24	Not Analyzed	<8.0
	downstream	2200	4.1	Not Analyzed	4300	65	Not Analyzed	17 J
2/10/19	upstream	580	2.3	Not Analyzed	950	.43 J	Not Analyzed	<8.0
	downstream	670	2	Not Analyzed	1500	2.3	Not Analyzed	<8.0
2/13/19	upstream	440	<5.0	Not Analyzed	830	<0.6	Not Analyzed	<20
	downstream	2600	7.5	Not Analyzed	5000	30	Not Analyzed	<20
2/26/19	upstream	61	<2.0	Not Analyzed	150	<0.24	Not Analyzed	<8.0
	downstream	120	<2.0	Not Analyzed	250	0.91 J	Not Analyzed	<8.0
3/20/19	upstream	24 J	<2.0	Not Analyzed	150	<0.24	Not Analyzed	<8.0
	downstream	49	<2.0	Not Analyzed	170	0.31 J	Not Analyzed	<8.0
3/27/19	upstream	28 J	<2.0	Not Analyzed	170	<0.24	Not Analyzed	<8.0
	downstream	350	<2.0	Not Analyzed	840	1	Not Analyzed	<8.0
4/5/19	upstream	160	<2.0	Not Analyzed	430	<0.24	Not Analyzed	<16
	downstream	86	<2.0	Not Analyzed	340	0.54 J	Not Analyzed	<16

Additional sampling from regular monitoring of Mule Creek, particularly during dry weather discharge, would be prudent for this facility as they implement the requirements of the MS4 permit.

5: Soil Sample Results

Comparison of background soil sample results to construction excavated soil samples did not show any impacts. Comparison of background soil sample results to perimeter ditch sample showed possible impacts of coliforms and ammonia. These constituents are also commonly detected in stormwater conveyed by the ditch.

6: Molecular Source Tracking Results

The Central Valley Regional Board staff and staff from the State Water Board's Environmental Laboratory Accreditation Program have repeatedly stated on numerous occasions that the molecular source tracking, biomarker analysis, and coliform speciation data is not applicable in determining compliance with Basin Plan Objectives, nor will it be used to make recommendations on enforcement actions. The methods are not EPA certified, as required by Water Code Section §13176 and the Environmental Laboratory Accreditation Program. In fact, an executive from the company that did the analysis for the first round of samples came to one of the meetings between the Regional Board and CDCR and stated that the methods and resulting data are not reliable enough to inform enforcement decisions. The Central Valley Regional Board maintains the position that these analyses are useful tools in narrowing down the sources, but cannot and will not be used to determine compliance with any regulations. Board staff again emphasize that all applicable water quality limits, including the Basin Plan Water Quality Objectives and WDR effluent limits, are for fecal coliforms, not specifically human fecal coliforms. The regulations do not specify the source of the coliforms, as coliforms from any source can impact beneficial uses. Therefore this limit should be enforced regardless of the determined source of coliforms.

7: Review of Report Conclusions

CDCR Conclusion 1: The Report concludes: "*SHN's site investigation efforts did not reveal any direct cross-connections between the stormwater and sanitary sewer collection systems.*"

Board Response: While there was no evidence of direct cross connections between the stormwater and sanitary sewer system, it is clear to Board staff that indirect cross connections have formed between the systems. There are numerous locations documented in the CCTV investigation where major defects in both systems could, and have, allowed infiltration and exfiltration. In several areas active infiltration was noted, even during the dry season with no recent rain. Several other sources of groundwater, including french drains and sump pumps, also are direct sources of groundwater

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infiltration. The Report also includes recommendations to make various repairs to both systems to minimize infiltration of groundwater and exfiltration of sewage.

CDCR Conclusion 2: The Report also concludes: *"Additionally, the analytical results provided no evidence that stormwater is comingled with wastewater, sewage, and/or grey water."*

Board Response: Board staff categorically disagree with this conclusion. Data from the roughly 600 samples clearly shows that waste constituents including VOCs, SVOCs, typical nutrients, metals, coliforms, and other organics, are regularly detected in the stormwater system. Further, over 35,000 lineal feet of sanitary sewer system video and 24,800 lineal feet of Stormwater system video shows significant defects in the sewer and stormwater piping system. This is strong evidence that wastewater of some sort is entering the system, whether through a direct cross connection, indirect cross connection, or through poor washdown/waste handling practices. In numerous cases the waste constituents are above water quality objectives, including MCLs and Basin Plan Objectives. This report provides substantial evidence that discharges from the stormwater system have impacted, and threaten to continue to impact, Mule Creek.

The condition of the sanitary sewer and stormwater system, along with observed practices at the facility, also support the conclusion that some volume of wastewater is entering the stormwater system.

CDCR Conclusion 3: The Report goes on to conclude: *"This investigation has identified the non-stormwater sources to be irrigation and groundwater within the stormwater collection system at MCSP."*

Board Response: While infiltrating subsurface irrigation water and irrigation water runoff do appear to make up some portion of the non-stormwater flow volume seasonally, it does not explain the waste constituents (other than disinfection byproducts and herbicides) that have been detected numerous times, many of which have over water quality objectives. Groundwater on the other hand has also been shown to be a source of the non-stormwater flow water, and may be contributing waste constituents by providing a conduit for an indirect cross connection between the systems. Many defects were found in the sanitary sewer CCTV investigation, including areas that The Report states *"present a potential threat to groundwater"*. Although exfiltration is usually harder to locate than infiltration, there are many locations where the Report states it could or is likely occurring. Additionally, artificially high groundwater exists below the facility. The low conductivity clays, conduits created by backfilled trenches, and recharge through irrigation and exfiltration from the sewer system has likely created a mound of impacted groundwater in which the stormwater system exists. The stormwater system itself contains defects and french drains that allow this impacted groundwater to infiltrate the system and flow out to the creek.

Board Summary of Conclusions: The Report presents clear evidence of high groundwater on the site, including CCTV footage of groundwater infiltration during extended dry weather. However, the Report gives the following explanation for the existence of high groundwater: *"Because groundwater typically mimics the surface topography, the shallow groundwater or perched groundwater likely flows beneath the institution at a similar level"*. Again, as Board staff previously stated in the Draft Comments, this interpretation is inaccurate as it makes broad, unsupported assumptions and ignores monitoring well data. Groundwater has been measured in on-site wells at a significantly lower elevation than what is presented in the Investigation Report. The Discharger's first quarter 2018 monitoring report (prepared by a different consultant) presented the potentiometric surface as over 20 feet deeper than what was interpolated in the *Investigation Finding Report*, despite using the same data. The flawed analysis presented in the Report used data from only two wells, one of which was located at the toe of the effluent reservoir, instead of several wells like the analysis in the monitoring report. The high groundwater at the site appears to be artificially mounded based on groundwater elevation data and topography. The Discharger previously proposed and was approved to install three groundwater monitoring wells within the facility perimeter, which would help better understand the hydrology and monitor groundwater likely being impacted by the leaking sanitary sewer system.

8: Review of Report's Recommendations

The Discharger's Report recommends reinitiating the discharge directly to Mule Creek despite the large amount of analytical data showing that various waste constituents have been consistently detected in the discharge. The data presented in the Report does not support this recommendation. The discharge of dry weather flows from the stormwater system as characterized here were clear violations of the Clean Water Act, and these continued discharges are now required to be addressed under the MS4 permit. Even with dilution, data collected during wet weather discharges shows impacts, including VOCs, in downstream samples. Repairs must be completed and Best Management Practices must be implemented in order to adequately protect downstream beneficial uses.

A list of recommended repairs to the stormwater and sanitary sewer system are presented in the Report. These repairs are recommended in order to *"minimize debris, gravel, sediment accumulation and infiltration of groundwater"* in the stormwater system, and *"minimize potential exfiltration of sewage, or infiltration of groundwater"* in the sanitary sewer system. It appears that the list of recommended repairs, found in Appendix 23, is conservative given the list of defects described in the Report. Many if not all of these repairs, along with additional scheduled inspections, are already required under the Sanitary Sewer System General Order which the system is already regulated under. The associated Sewer System Management Plan should also be reviewed, revised according to the findings of this report, and implemented.

The Report further recommends semiannual inspections of some stormwater system features, as well as the continued maintenance of sediment traps, annual training of personnel, and bird abatement efforts.

Finally, the Report recommends the "*cessation of all ordered sampling and associated activities, domestic well monitoring, and development of a final waste disposal plan.*" Board staff does not agree with this recommendation, as no improvements have been made to the site to address the waste constituents detected in stormwater system or the known defects in both systems. Until repairs the sources of those waste constituents and non-stormwater flows are eliminated through implementation of the Small MS4 General Permit and an appropriate proof period has elapsed, Board staff recommends that sampling continue.

9: Board Staff's Conclusions

Based on the review of the *Revised Storm Water System Investigation Findings Report*, Board staff has concluded the following:

1. Indirect cross connections are likely occurring between the stormwater and sanitary sewer systems. The CCTV footage shows many instances of corrosion, defects, joint separations, holes in the plumbing of both systems. The mapping effort also shows these systems are often very near each other, with the sewer system pipes often installed above the stormwater system pipes.
2. Groundwater is artificially mounded under the Old Prison, likely from the known leaks in the stormwater system, sewer system, and pressurized irrigation system. Because of the lower elevation of the stormwater perimeter ditch it is not possible that groundwater is naturally occurring at the elevation that these systems were installed beneath the prison. The only potential source within the perimeter is the Prison itself. There are multiple instances in the CCTV footage showing groundwater infiltrating through defects (not only through French drain segments) in the pipes into both systems during the dry season. This is likely exacerbating these indirect cross connections caused by the numerous defects in those systems. These three systems being in indirect communication explains both the dry weather flows and the various waste constituents detected in the stormwater system.
3. Poor washdown and dumping practices near storm drains within the Old Prison is likely contributing to some of the waste constituents detected.
4. Constituents characteristic of both domestic and industrial waste are detected regularly in the stormwater system discharge. Concentrations of many of these waste constituents fluctuate significantly. This is in direct opposition with CDCR Conclusion 2 above.

5. Paired upstream and downstream samples collected during discharge events clearly show there are significant impacts to downstream water were occurring, even when the discharge is diluted by runoff.
6. Coliforms in the stormwater discharge may be elevated by bird droppings within the prison. However, the source of the coliforms is inconsequential, as the Basin Plan limits for surface water do not specify the source of the coliforms, only the numerical limit.
7. Molecular source tracking is not a reliable enough method to determine compliance, as emphasized by the State Water Board's ELAP staff and one of the laboratories doing the analysis. While data collected using this method can be used as a tool to select potential corrective actions, it should not be used as a line of evidence to determine if a discharge contains human waste. Only EPA approved methods should be used for compliance and enforcement purposes, as is the policy of the Board.

In summary and to reiterate, the monitoring data, condition of the sanitary sewer and stormwater system, artificially high groundwater, and observed practices at the facility support the conclusion that some volume of wastewater is entering the stormwater system via indirect cross connections and poor housekeeping practices.

10: Board Staff's Recommendations

Board staff makes the following recommendations to address the issues discussed in this memo:

1. Reiterate the requirement to immediately cease the discharge of all water containing waste constituents to Mule Creek.
2. Reiterate the requirement to appropriately treat and dispose of all water collected from the stormwater collection system that contains waste constituents.
3. Require monitoring of the stormwater system on a regular basis under the MS4 Permit to determine if corrective actions are effective. Analytes should include industrial waste compounds, domestic waste constituents, and any herbicides or pesticides used on site. In particular, dry weather flows should be sampled.
4. Require any discharge to Mule Creek to be sampled, as well as upstream and downstream locations during the discharge. Constituents analyzed should include should include industrial waste compounds, domestic waste constituents, and any herbicides or pesticides used on site.
5. Require CDCR to submit a workplan to address all pipe defects described in the *Revised Storm Water System Investigation Findings Report*.

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6. Require the installation of the groundwater monitoring wells proposed by CDCR within the Old Prison, and additional monitoring devices as necessary, to determine if groundwater is being impacted and to monitor the effectiveness of any implemented corrective actions.

EXHIBIT “22”



Region 9 Enforcement Division
75 Hawthorne Street
San Francisco, CA 94105

Inspection Date(s):	November 19, 2020		
Time:	Entry: 10:35 AM	Exit: 3:00PM	
Media:	Water		
Regulatory Program(s)	Clean Water Act NPDES, Small MS4 Municipal General Permit		
Company Name:	Mule Creek State Prison		
Facility or Site Name:	Mule Creek State Prison		
Site Physical Location:	4001 Highway 104 Ione, CA 95640		
Geographic Coordinates:	38.36866, -120.95945		
Mailing address:	P.O. Box 409099 Ione, CA 95640		
Facility/Site Contact:	Gregor Larabee	Title: Chief Engineer and Regulatory Compliance	
		Email: Gregor.larabee@cdcr.ca.gov	
Facility/Site Identifier:	National Pollutant Discharge Elimination System (NPDES) Permit CAZ496995		
NAICS:			
SIC:			
Facility/Site Personnel Participating in Inspection:			
Name	Affiliation	Title	Email
Gregor Larabee	CDCR	Chief, Environmental & Regulatory Compliance	gregor.larabee@cdcr.ca.gov
Christofer Hudgens	CDCR	Plant Manager	christofer.hudgens@cdcr.ca.gov
Anthony Orta	CDCR	Plant Supervisor	anthony.orta@cdcr.ca.gov
Anthony Stark	CDCR	Plant Supervisor	anthony.stark@cdcr.ca.gov
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California Department of Corrections / Mule Creek State Prison
 Inspection Date: November 19, 2020

		Date:
Manager:	Eric Magnan ERIC MAGNAN	415-947-4179
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SECTION I – INTRODUCTION

I.1 Purpose of the Inspection

The purpose of the inspection was to evaluate multiple citizen complaints and accompanying documentation about the facility that was received by EPA, and to inspect the components of the wastewater and stormwater system viewable from outside the perimeter security fence.

SECTION II – FACILITY / SITE DESCRIPTION

II.1 Facility Description

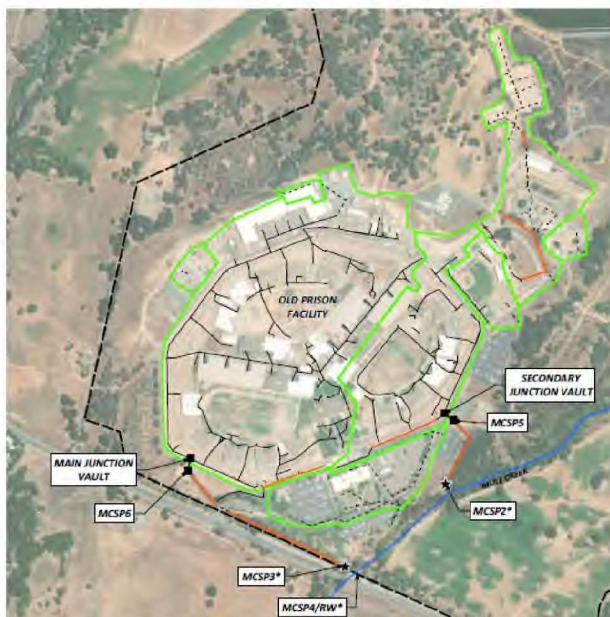
Mule Creek State Prison (MCSP, Facility) is located in the City of Lone in Amador County. According to the October 2020 Mule Creek State Prison Sewer System Management Plan, the original MCSP institutional building (noted as MCSP in this report) was opened in 1987, and an additional prison building, the Mule Creek Infill Complex (MCIC), was built in 2015. The prison has level I, II, III, and IV prison facilities. The institution covers 866 acres and has a population capacity of approximately 4,270 inmates.

The MCSP sewer system is approximately 5.75 miles accumulated length, which includes 4.75 miles of gravity lines and one mile of forced main. The system piping is PVC that ranges in size from four to eighteen inches in diameter. Building piping is primarily 4-inch cast iron. All sanitary sewer waste from the original facility building is conveyed by gravity to a pump station at the southeast corner of the institution outside of the secure perimeter. A 6-inch main from the MCIC lift station transports waste from MCIC to the main lift station at MCSP. Additionally, wastewater from the neighboring Preston Youth Correctional Facility (PYCF) and the California Department of Forestry (Cal Fire) Academy join the MCSP wastewater flow just upstream of the pump station. There is one pump station for the wastewater system that services the entire Facility. This pump station is fitted with in-channel grinders and mechanical bar screens for the removal of inorganic solids (PHOTOS 1-6). Screened wastewater is then pumped via a 14-inch diameter force main to the institution's Wastewater Treatment Plant.¹ The Wastewater Treatment Plant operates under Waste Discharge Requirements (WDR) R5-2015-0129, issued by the California Regional Water Quality Control Regional Board. Item 14 of the WDR states that "the secondary disinfected effluent is discharged to the LAAs (land application areas), Effluent Storage Reservoir, or Preston Reservoir"². No discharge from the Wastewater Treatment Plant is authorized to reach surface waters.

¹ Sewer System Management Plan – Mule Creek State Prison, December 2009 (Updated October 2020), page 4.

² WDR R5-2015-0129 – California Regional Water Quality Control Board – Central Valley Region, page 3.

Additionally, Mule Creek State Prison is regulated under the NPDES General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4) Permit, Water Quality Order No. 2013-0001-DWQ (Small MS4 General Permit). The California Central Valley Regional Water Quality Control Board (Regional Board) accepted a Notice of Intent to apply for coverage under the Small MS4 General Permit on April 24, 2019. There are currently two junction vaults which serve as stormwater collection points at the Facility – the main junction vault, which flows directly and solely to the main outfall, and the secondary junction vault, which flows directly and solely to the secondary outfall. Both vaults have one set of two slide gates. When these slide gates are opened, water can pass from the vault to the outfall. These outfalls are being monitored at seven monitoring points, which are referred to in SHN Consulting reporting as “main junction vault”, “secondary junction vault”, “MCSP2”, “MCSP3”, “MCSP4/RW”, “MCSP 5”, and “MCSP 6”. The green lines on the SHN Consulting map above indicate the drainage area for the original MCSP building, and the red lines on the map indicate surface drainage channels where flow is directed after passing through either outfall.



II.2 Wastewater Sources

The wastewater treatment plant receives sewage from prison residences, industrial operations located onsite (meat packing, coffee roasting, and laundry services), wastewater from the Preston Youth Correctional Facility, and wastewater from the California Department of Forestry Fire Academy.

Stormwater from the facility discharges via two outfalls to the receiving water Mule Creek (see map in Appendix 1).

II.3 Wastewater Treatment

According to WDR items 11 and 14, the Wastewater Treatment Plant (WWTP) consists of two bar screenings, an oxidation ditch, two parallel clarifiers, an 84-inch chlorine contact pipe, a sludge belt press, sludge drying beds, an Effluent Storage Reservoir, and LAAs. After treatment in the oxidation ditch and clarifiers, the wastewater is disinfected in the chlorine contact pipe. The secondary disinfected effluent is discharged to the LAAs, Effluent Storage Reservoir, or Preston Reservoir. In item 27 of the 2015 WDR, MCSP proposed the addition of aeration to the existing oxidation ditch, addition of a third clarifier, replacement of the chlorine contact pipe

with a chlorine contact basin, and replacement of sand and gravel sludge drying beds with concrete sludge drying beds.³ Since the WDR was adopted, these additions have been installed at the WWTP.

II.4 Compliance History

According to the California Integrated Water Quality System (CIWQS), the Regional Board filed a Cease and Desist Order on December 8, 2006 for various violations of the WDR including prohibited discharge of wastewater and overloading of the WWTP, and oversaturation resulting in spills at the Facility's LAAs. On August 21, 2007, MCSP paid a \$50,000 administrative civil liability penalty, was required to perform system improvements on its wastewater treatment system, complete a supplemental environmental project, improve LAA monitoring, and make other reporting and system improvements as a result of these violations.

CIWQS includes five Notices of Violation filed by the Regional Board between December 2016 and the present, and a 13 267 Investigative Order and 13 260 follow-up request letter filed in 2018. A February 4, 2018 13 267 Order filed by the Regional Board alleges that MCSP was discharging unpermitted stormwater to Mule Creek, and failed to obtain coverage under the Construction General Permit and Industrial General Permit. The 13 260 letter filed by the Regional Board requested documentation not provided as requested in the 13 267 Order. The Regional Board filed proposed penalty order R5-2020-XXXX in July 2020 alleging 79 days of unpermitted non-stormwater discharge from the stormwater system. The July 2020 proposed penalty order includes a monetary penalty and additional project requirements. This penalty order has not been finalized.

SECTION III – OBSERVATIONS

The inspection began with Inspector Scavello presenting his credentials to Mr. Larabee, MCSP Chief of Environmental and Regulatory Compliance. Inspector Scavello, Inspector Tinger, and Regional Board staff engineers Kenny Croyle and Howard Hold and Regional Board MS4 Coordinator Liz Lee introduced themselves to the following staff from CDCR: Christofer Hudgens, Anthony Orta, Anthony Stark, Terry Bettencourt, and Estevan Fregeau. SHN consultant Gwen Erickson was also present and introduced herself. Inspector Scavello explained that this was a compliance inspection to investigate citizen complaints which had been received by EPA about MCSP, and to inspect the components of the wastewater and stormwater system viewable from outside the perimeter security fence. Inspector Scavello consulted with MCSP staff on COVID-19 protocols to be practiced during the inspection, locations he desired to view during the inspection, and discussed the best route to do so with MCSP staff. EPA, MCSP, and Regional Board staff agreed via phone before the inspection that, due to COVID-19, the entirety of the inspection would be conducted outside of the perimeter security fencing at MCSP.

³ Summarized from WDR R5-2015-0129, items 11, 14, and 27.

Secondary Junction Vault/ Secondary Outfall/MCSP-5

EPA inspectors viewed the secondary junction vault, secondary outfall, and sample point MCSP-5 which is located approximately 50 feet from guard tower 9 (GT-9) (PHOTO 7-9). The secondary junction vault flows to the secondary outfall, and sample point MCSP-5 is located at the terminus of the secondary outfall (PHOTO 10).

At the secondary junction vault, Mr. Hudgens explained that 60 acres from inside the perimeter fence including prisoner housing and recreation areas "Facility A", "Facility B", and "Facility C" and lawn areas as shown on the map in APPENDIX 1 drain to the secondary junction vault, and that drainage to this basin is composed of stormwater and irrigation from grass areas in the prison yard. EPA Inspectors observed a slow seep of water flowing out of stormwater piping that terminates at the secondary junction vault, and Mr. Hudgens explained that this water was flow from a rain event the previous day. Mr. Hudgens explained that the two pumps shown in PHOTO 8 operate on a float, and when the junction vault fills to a high enough level the pumps are triggered on, which pumps water back to the sanitary sewer for processing through the waste treatment plant. He stated that the pumps were installed in 2018 after an enforcement order from the Regional Board, that they have a capacity of 20 gallons per minute (GPM), and that two flow meters measure the amount of flow directed back to the waste treatment plant. Mr. Hudgens commented that since the pump system has been in place, the secondary junction vault has not overtopped its capacity. Mr. Hudgens explained that, prior to the pump system being installed, a major rain event would cause the junction vault to overtop with water and back up to the area behind the junction vault. The backup was of a significant enough volume that it would reach and inundate guard tower GT-9. Mr. Stark explained that the screens in the drainage basin are cleaned after every rain event.

Mr. Fregeau stated that the wastewater treatment plant can handle storm flow at 1/10" an hour, and that both slide gates seen in PHOTO 8 will be opened in anticipation of a rain event greater than 1/10" an hour or 3/10" in 24 hours. After the inspection, Mr. Fregeau provided EPA with a written explanation on how this calculation was made, and that written explanation is presented as APPENDIX 5. Mr. Fregeau stated that both sets of slide gates at the main and secondary junction vaults were last opened at 3:15PM on Tuesday, November 17th in anticipation of a rain event above the size limitation, and that they were closed in the morning prior to the EPA inspection on November 19th. EPA Inspectors observed flow passing underneath the closed slide gates to the outfall area, and Mr. Hudgens commented that this occurs because the slide gates are not fully sealed to prevent flow underneath.

The secondary junction vault drains directly to the Secondary Outfall via two outlet pipes (PHOTO 10-11). The larger diameter, silver corrugated pipe in PHOTO 11 had a very small amount of flow, and the smaller diameter black pipe had no flow. Residual flow from the

previous rain event can be seen pooling in front of the outfall in PHOTO 10. PHOTO 12 shows an automatic sampler at sample point MCSP-5 with sampling leads placed at the outfall pipes. Inspector Scavello asked what the purpose of the autosampler was, and Mr. Hudgens explained that MCSP's consulting company SHN installed the autosamplers to sample for human biomarkers. Ms. Erickson, the SHN consultant present during the inspection, explained that the autosamplers have been in place for between 1-1.5 years and they take grab samples during a six-hour period before, during, and after a rain event. Mr. Larabee commented that a weekly monitoring report is produced by SHN showing monitoring activities at MCSP, and that this report is produced as a result of the Regional Board 13 267 February 14, 2018 Order. An abbreviated example of this report is shown as APPENDIX 6, and includes tabulated results, along with all lab reports, for each daily sampling event during that reporting week, the daily totalized volume measurements of wastewater collected out of the entire storm water system, broken down by discharge point, the flow shall be measured with a calibrated flow meter, the amount of rain that fell over the prison, a description of any changes, improvements, or upgrades that occur, notes on any changes at the wastewater treatment plant in terms of effluent quality and treatment effectiveness, and any other additional findings or observations. After reviewing the November 20, 2020 weekly report, it is not clear that any human biomarker constituents are present in the sampling analysis. The weekly report does appear to list sampling constituents consistent with those ordered to be sampled in the Regional Board's August 6, 2020 13 383 Order to monitor surface discharges.

During the inspection Mr. Larabee commented that approximately 35,000 gallons were pumped back to the wastewater treatment plant during the last rain event (which occurred Tuesday, November 17th-Wednesday, November 18th) and approximately one million gallons total flowed through the open slide gates at both outfalls. After the inspection, Inspector Scavello verified these numbers as 40,969 gallons and 1,119,250 gallons, and total rainfall amount as 0.74" for the week ending November 20, 2020 according to the weekly monitoring report in APPENDIX 6. These total weekly values are calculated using two flowmeters on each of the two pumps as shown in PHOTO 9 and two flowmeters in each pipe exiting each junction vault as shown in PHOTO 11. After the inspection Inspector Scavello noted a value of 1,007,681 gallons as reported to the Cal OES spill reporting system⁴ for the rain event beginning November 17, 2020.

MCSP-2 and MCSP-3 Sample Points

PHOTO 13 shows the autosampler set up at the MCSP-2 sample point. This autosampler is set with the same sampling frequency as the autosampler at MCSP-5 and the other sample points,

⁴<https://w3.calema.ca.gov/operational/mal haz.nsf/f1841a103c102734882563e200760c4a/282caaeaed8d46d58825862600588641?OpenDocument&Highlight=0,mule,creek>